

Livia Rainsberger

AI – the new intelligence in sales

Tools, applications and potentials
of Artificial Intelligence

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Livia Rainsberger
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A Journey into the AI World

With its fascinating and numerous possibilities, artificial intelligence gives the impression of a wonderland: Much seems possible, as well as impossible at the same time, very near and meanwhile also far away. This book accompanies you on a journey into the world of AI and tries to create order in the chaos of possibilities, so that you can gain insight into the AI potential in sales and identify important and relevant areas for AI use. Just as the white rabbit in Alice's Wonderland is in a hurry and thinks he's too late, the book also wants you to understand that you shouldn't take much longer with the topic. Because AI isn't somewhere on the other side of the world or in the distant future, it's now a tangible reality for every sales organization, regardless of its size or line of business. Artificial intelligence in sales is not a dream or a vision of the future but an achievable reality: it creates more business opportunities, increases efficiency, and enhances sales effectiveness through a new dimension of intelligence that it brings with it.

Artificial intelligence (AI) seems to be *the* new big thing these days. You hear about it, see it, and read about it. It has become the buzzword of the day and is literally everywhere: in the media, in literature, and at conferences, events, and webinars. AI is written about, discussed, debated, and movies are made. It polarizes, and experts debate on whether it is good or bad for humanity. But one thing is certain: it is here to stay and will have a major impact on our future.

Speaking of the future, AI has always been associated with the future. For decades, AI technologies have fired people's imaginations, think HAL-9000 or the Terminator. The core idea here is that at some point – in the future – machines will take control of humanity and the only solution seems to be to pull the plug. In reality, though, we're nowhere near that point and, according to experts, won't be for a while yet.

AI Is Already Here

The fact is that AI technology is no longer a topic of the future but a tangible reality today. It has long since entered our lives and our homes, but in a different way than in our imagination. And most of us are not aware of it. The fact is that we are now surrounded by a plethora of sophisticated AI tools specifically designed to simplify all aspects of our modern lives.

Because we live in a new digital world and are thus used to speed and convenience, we constantly experience something new and are fascinated by it, and it has become commonplace that everything we need is more or less immediately at our fingertips: usually just a few clicks away. AI is the perfect answer to our modern world: it can excite us, quench our impatience, and fulfill our desires in a subtle and extremely convenient way so that we don't even notice. So, it is also very welcome in our lives, even if we do not know of its existence in this form.

We Just Don't Know

The fact is that we all use AI algorithms every day, especially when we buy something online. AI programs filter your search results; recommend songs, books, and shower gels; and block unwanted emails. On your smartphones, they wait for voice commands and very carefully register every conversation and change of location. On social media, they closely analyze your behavior and use it to play personalized ads for you. They decide which banners you see when you visit a website and even which version of that website you see, and AI chatbots prompt you for conversation or answer your questions. If you're looking for a plane ticket, they decide what price to show you, and if you're about to buy something, they suggest matching complementary products. When you call a call center, AI algorithms listen and evaluate what you say and your emotions, and even your application to a corporation may already be sorted out by AI algorithms. Algorithms may decide whether your application goes through to the next round, not a member of the HR department.

We wake up with AI and go to bed with it: it decides what news you will read over your morning coffee, predicts the weather, calculates the optimal route to the office, keeps the lane on the highway, and in the evening, it suggests interesting movies to stream.

Amazon, Google, Facebook, Zalando, Netflix, and Spotify, all the platforms we use every day, are using AI technology to analyze our behavior and improve our

experience as customers. After all, the goal of using AI is to increase our satisfaction as customers and make us even more loyal to a provider. In addition, it makes processes on the provider side more efficient and saves costs and resources.

How Does It Do It?

The answer to this question is the goal of this book: to unravel the mysteries behind AI algorithms and create for you a clear understanding of what opportunities and potential artificial intelligence holds for you and your company. After reading this book, you will have a better idea of how to turn a buzzword into lived sales practice in your organization.

It is time – **now** – to use this technology in your own company in order to benefit from its diverse potentials in the best possible way. Because as a customer, we already use AI technology on a daily basis – even if we often don’t even know it – and thus also create a high level of acceptance for this technology in the market. Why shouldn’t we do the same *for* our customers?

What You Can Expect

To create a clear reading structure, the content is divided into the following parts:

First, in the chapter “Explanation: What Is New and Different About AI?” (Chap. 1), the term AI is demystified so that you can better understand the real meaning of the buzzword. This book does not claim to describe AI functionality in detail but to create an understanding for the possibilities of AI in the sales area. Thus, in this sense, technical explanations are avoided as much as possible, and only the technical knowledge that is considered necessary for understanding the potential of AI for sales is provided.

The goal of demonstrating AI potential is served by the chapter “Benefits: What AI Can Do for Sales” (Chap. 2), in which the numerous advantages of AI for sales organizations are explained. This should give you a better understanding of what AI can do for sales in general and what opportunities it holds so that you can derive the benefits for your own company.

It is undisputed that AI is revolutionizing many areas of our lives, and sales is not spared: AI is permanently changing sales approaches, activities, and processes. It is reshaping sales on multiple levels. The revolution has begun, and the section “From the AI Revolution to the Sales Revolution” (Sect. 2.5) is dedicated to it.

AI can now support the entire sales process in all its individual parts. The chapter “Relevance: How AI Supports the Sales Process” (Chap. 3) serves to illustrate its possibilities on the basis of the sales process. Here you will get an impression of how AI supports the sales process from A to Z, including sales management and sales efficiency.

In the chapter “Practice: AI Tools and Their Application Possibilities” (Chap. 4), you will get a general overview of the AI tools available on the market today and their applications. The aim of this chapter is to provide a good overview of the diverse possibilities of AI for sales in as condensed a form as possible. You will find an overview of the currently known AI tools as well as tool categories in the individual subchapters including practical examples. This should give you concrete ideas on how AI can also be useful for your company. Due to the structure of the chapter, you can look up the respective areas at any time or quickly decide whether the topic is relevant for you.

This is followed by “Looking to the Future: How AI Will Change the Sales Role” (Chap. 5) to see how AI will influence sales and the sales role, and what the sales organization of the future might look like. Here, we also address the classic question, so often debated: *Will AI replace the salesperson?*

At the end of our journey in Chap. 6 “What to Do: Recommendations for Action for Sales Organizations”, you will find concrete advice on how you can embark on your own AI journey with your sales organization to create real business potential from the AI buzzword.

Who Is the Book Aimed at?

This book is primarily addressing sales management, executive management, and sales and marketing executives who want to gain an understanding of the potential of AI for sales in small and medium-sized companies. Sales and marketing staff, as well as anyone else interested in the topic, will of course also benefit from reading this book.

Basically, the book is aimed at all those who want a condensed overview of the possibilities of AI for sales. It largely dispenses with theory and also makes no claim to completeness. Primarily, it is intended for executives who do not have the time and opportunity to deal extensively with these complex topics in addition to their daily business. This book should make it easier for them to decide whether and to what extent they want to deal with the topic of AI in sales in depth.

So, it's best to embark on this exciting journey into the wonderland of artificial intelligence with an open mind. Some things will amaze and fascinate you, some

will sound adventurous, and some will even sound too good to be true. But don't worry, the book will help you find your own golden key: to a clear vision of what AI can do for you and your business. The book will make you aware of many potentials – small and big – that you can unlock for your sales and help you identify the right opportunities for you and your business.

I would like to encourage you to follow the white rabbit with the pocket watch with an open mind and perhaps take the courage in a further step to also implement AI in your company.

Contents

- 1 Explanation: What Is New and Different About AI? 1**
 - 1.1 Why Now? 3
 - 1.2 Why Not in SMEs? 6
 - 1.3 ANI, AGI, ASI: The Terms Behind the AI Myth 8
 - 1.4 ANI: The Weak but only AI 10
 - 1.4.1 Symbolic AI 11
 - 1.4.2 Machine Learning 11
 - 1.4.3 Deep Learning 12
 - 1.5 How Do Algorithms Learn? 13
 - References 16
- 2 Benefits: What AI Can Do for Sales 17**
 - 2.1 AI: Capabilities and Limitations 18
 - 2.2 AI: The Solution for the High Volume of Data in Sales 19
 - 2.3 Advantages of AI for the Sales Department. 21
 - 2.4 AI Analysis Capabilities. 26
 - 2.5 From the AI Revolution to the Sales Revolution 29
 - 2.5.1 Efficiency: Increasing Sales Productivity and Performance 29
 - 2.5.2 Effectiveness: Patterns of Success to Enhance Performance 31
 - 2.5.3 Competence: Conservation and Transfer of Know-How . . . 32

2.5.4	Strategy: Potentials for Strategic Sales Management.	33
	References	34
3	Relevance: How AI Supports the Sales Process	35
3.1	Lead	35
3.2	Deal	37
3.3	Processing	38
3.4	Development	39
4	Practice: AI Tools and Their Application Possibilities	41
4.1	Call Center Intelligence	43
4.2	Sales Analytics	48
4.3	Price Intelligence	51
4.4	Product Configuration Intelligence	54
4.5	Pipeline Management Intelligence.	57
4.6	Quote Generation Intelligence	60
4.7	Communication Intelligence	62
4.8	Contract Lifecycle Management	65
4.9	Sales Enablement.	67
4.10	Forecast Intelligence	70
4.11	Sales Automation	72
4.12	Social Media Intelligence.	75
4.13	Sales Coaching Intelligence.	77
4.14	Sales Efficiency	80
4.15	Sales Management Intelligence	82
4.16	Inside Sales Intelligence.	85
4.17	Customer Relationship Management Intelligence	88
4.18	Conversational Intelligence	92
4.19	Lead Intelligence	96
4.20	Sales Prospecting Intelligence	99
	References	102
5	Looking to the Future: How AI Will Change the Sales Role	103
5.1	Will AI Replace the Salesperson?	104
5.2	How AI Will Influence the Sales of Tomorrow	108
5.3	How AI Is Reshaping Customer Needs and Expectations	111
	References	113

6 What to Do: Recommendations for Action for Sales Organizations ...115

6.1 Creating the Right Perspective.....116

6.1.1 The True Potential of AI Lies in Business
Expansion and Revenue Gains117

6.1.2 AI Changes Go-to-Market Strategies and Sales Models ...117

6.1.3 The Transformation of Business Processes and the
Customer Are in the Foreground118

6.1.4 AI as a Strategic Sales Resource119

6.2 Developing an AI Strategy119

6.2.1 Evaluation of AI Potential: What Can AI Do and
How Does It Influence the Market Environment?120

6.2.2 Strategy Evaluation: Is the Sales Strategy Up to Date? ...121

6.2.3 AI Priorities and Objectives: How Can AI Support the
Implementation of the Sales Strategy?.....121

6.2.4 Prerequisites: Are the Requirements for the
Implementation of AI Fulfilled?.....122

6.2.5 Implementation: What Is the Implementation Plan?123

6.2.6 Change Management: What Changes Does the
Strategy Entail?123

6.3 Promoting Acceptance Among Employees125

6.4 Developing AI Projects in Sales.....126

6.4.1 Customer Perspective.....126

6.4.2 Sales Perspective129

6.5 Creating Conditions131

6.5.1 Budget and Resources131

6.5.2 Technology Access.....132

6.5.3 Infrastructure135

6.5.4 Processes135

6.5.5 Data Ecosystem136

6.5.6 Ethics and Regulations.....138

6.5.7 Skills and Competences138

6.6 Ensuring the Success of the First AI Project140

6.6.1 Five Success Factors of the First AI Project.....141

6.6.2 Three Implementation Traps to Avoid in Your First
AI Project143

References144

Conclusion: The New Intelligence145

References.....147

About the Author



Mag. Lic. Livia Rainsberger focuses her activities on enabling sales in digital times. With the WISSENCE SALES INDEX © concept and consulting services, she supports companies in successfully mastering the digital transformation of their sales organizations. With keynotes, lectures, trainings, and individual consultations, she creates awareness about this complex topic in companies and helps them to generate added value out of modern technologies. She also teaches artificial intelligence in sales and marketing at several universities of applied sciences.

Abbreviations

AGI	Artificial general intelligence
AI	Artificial intelligence
ANI	Artificial narrow intelligence
API	Application programming interface
AR	Augmented reality
ASI	Artificial super intelligence
BI	Business intelligence
CLM	Contract lifecycle management
CPQ	Configure, price, quote
CPU	Central processing unit
CRM	Customer relationship management
GDPR	General data protection regulation
ERP	Enterprise planning
FAQ	Frequently asked questions
GAFA	Google Apple Facebook Amazon
GPU	Graphic processing unit
IT	Information technology
KAM	Key account management key account manager
AI	Artificial intelligence
KPI	Key performance indicator
ML	Machine learning
NLP	Natural language processing
NLU	Natural language understanding

NPS	Net Promoter Score
POS	Point Of Sale
ROI	Return on investment
SaaS	Software as a service
SEO	Search engine optimization
SOL	Structured Query Language
TAM	Total addressable market
VR	Virtual reality



Explanation: What Is New and Different About AI?

1

Abstract

The term Artificial Intelligence is overused and most of us misperceive the actual capabilities of AI. Artificial intelligence is not new, but only in recent years has it gained relevance thanks to the recent technological developments that have allowed it to spread and evolve. AI has long been used by the world's leading companies, who have it to thank for their market leadership, among other things. While Google, Facebook, Amazon & Co benefit from AI technology on a daily basis, it is still a myth in the SME sector and seems to be too far removed from the reality of businesses. Big mistake, because AI can be used today even in the smallest companies and opens up additional or new potential for business there. The fanciful notions we cultivate about AI have nothing to do with the reality of algorithms.

When we hear the term AI, we still imagine human-like robots, with fully developed consciousness, that talk and think like us and, if not the world, will certainly take over our jobs. Somehow AI is associated in our minds with a higher intelligence that is superior to us, and thus it also scares us.

Table 1.1 Development steps of artificial intelligence

Period	Development step AI	Functional principle
<1960	Native algorithms	I repeat
<2010	Machine learning	I imitate
<2018	Deep learning	I learn
2020	Deep reinforcement learning	I learn to learn
Future	Swarm deep reinforcement learning	I contribute

However, this idea, which is based on science fiction movies and TV shows, is quite a bit removed from the reality in real life. The fact is that today we cannot – yet – create robots that really resemble us humans. But what we can, and have long since implemented: Create AI programs that can perform endless tasks at a speed that until recently was unimagined and in itself is only limited by physical computing power.

► **Definition** There are long and complex definitions of artificial intelligence, but in a nutshell it is about processes in which machines learn how to learn. Computer systems imitate human intelligence by simulating intelligent behavior based on specific or learned patterns.

Basically, artificial intelligence uses the same basic algorithmic functions that are used in programming traditional software, but applies them in a different way.

For example, a standard software can analyze the sales performance of the past periods and calculate the given metrics, while an AI-driven system can find correlations in the metrics, reveal the causes of the over- or underperformance and their effects, and also derive future trends and even recommend actions to fix them.

AI programs are basically computer programs that have evolved over time. Just like humanity, they have their own evolution behind them.

The Development of AI

- In the beginning, computers could only execute instructions, but could not store or “remember” them: Native algorithms were only able to simply execute the tasks imposed on them over and over again. They merely **repeated**.
- It took 50 years for machine learning algorithms to allow computers to act and make data-driven decisions, rather than having to be explicitly programmed to perform a specific task. They began to **imitate** human behavior.
- Shortly thereafter, high computing power made it possible for computers to **learn** unsupervised from unstructured or unlabeled data: To recognize objects themselves and translate language in real time.
- At their current stage of development, algorithms are learning to **learn themselves**, and soon they will be expected to **contribute** (see Table 1.1).

1.1 Why Now?

As you can see, AI is not really new. It has its beginnings as far back as the 1940–1950s, but it is only in the last few years that it has seen a huge leap in its development. Why now? Simply because technology has made it possible. Primarily, there are three factors, based on three laws, that have created the conditions necessary for it to happen:

- The **high computing power**: Moore’s Law states that the power of computers to process information doubles every 18 months.
- The **high speed of communication**: Butters Law states that the amount of data transmitted over an opticfiber doubles every 9 months.
- The **high storage capacity**: Kryder’s law states that the dencity of hard drives doubles every 13 months.

All of these technological developments have enabled the rapid advancement of AI, causing powerful impacts on our world. It is a time of rapid change at all levels of society, economy, and technology, the interplay of which has never been seen in any other era. The pace at which these changes are occurring is so dramatic that we

find it difficult to comprehend with our brains. This speed can be represented graphically by a mathematical expression that does not often occur in nature: the exponential curve, which is difficult for humans to imagine.

Example

If you fold a piece of paper in half over and over again, how many folds would it take to make a folded sheet whose thickness extends from the earth to the sun?

Before you read on, think for a moment about a possible answer. *What does your intuition say?*

Typically, the answer is estimated very differently, with options in the millions or billions being the rule. The surprise is great when you realize that only 52 folds are necessary if the sheet of paper is 0.01 mm thick. And if you fold it 103 times, it becomes as thick as the universe. Unimaginable, isn't it?

We don't grasp exponential growth because our minds are conditioned to grasp growth and change in linear terms. We are familiar with this, because this is the pace of our human life. We age, one year at a time. Trees grow slowly, branch by branch. Everything in our life has its, more or less orderly, course and we are not used to situations where things change gradually and then suddenly with unexpected speed.

We all experienced the exponential growth firsthand during the COVID-19 crisis. Most of us – if not all, except for the mathematicians and the scientists – underestimated the speed of the virus' spread. And this is not because we are less intelligent than the scientists, but because human intuition is wired to detect only linear developments, and our brains have difficulty grasping or imagining exponential growth rates.

We Underestimate the Progress of Technology

It is similar with technological development: even though we all know that technology is developing rapidly, we cannot grasp the true extent of its exponential growth. Here, too, we tend to fundamentally underestimate progress. It's no surprise, then, that businesses also tend to underestimate the impact of digitization, or even be

completely blind to it. After all, we are in the era of so-called digital Darwinism, in which technology and society are evolving faster than the business world can naturally adapt.

- Companies develop linearly, whereas technology develops exponentially. This creates a gap between the actual value created by companies and what would be technologically possible. This gap grows larger and larger over time and holds enormous untapped potential (see Fig. 1.1).

Data Madness

We have the same lack of imagination when it comes to data growth. Here, too, we are dealing with exponential growth. We produce vast amounts of information every day, far more than we realize. Every digital process, every system or every interaction in the digital space generates large amounts of information and creates a high volume of data.

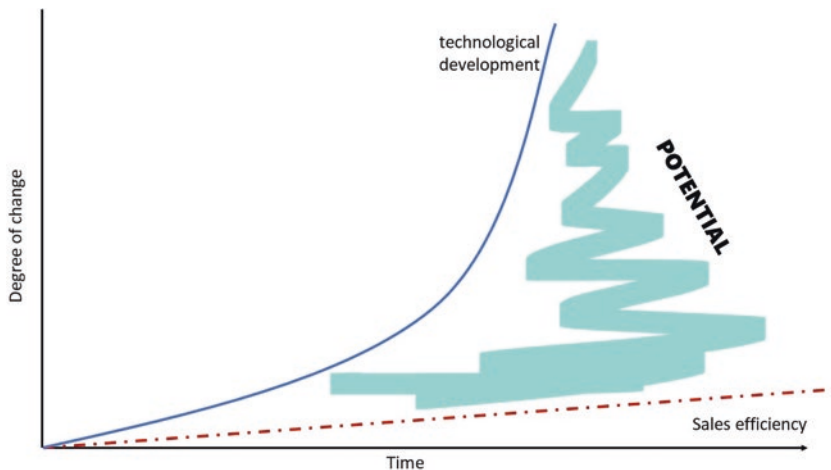


Fig. 1.1 The potential for digitization in sales

- 90% of all data worldwide has been generated in the last few years. In the last ten years alone, we have seen a 50-fold increase in data volume.

It is estimated that humanity will produce 44 zettabytes of data this year. That's 44 trillion gigabytes. One gigabyte can hold the contents of enough books to fill a shelf ten meters long. Multiply that by 44 trillion. Even this idea becomes a challenge for our brain.

And it goes even further: the worldwide data volume is expected to grow to a full 175 zettabytes – that's 175 with 21 zeros – by the year 2025. If this amount of data were stored on conventional DVDs, the stack would exceed the distance between the earth and the moon 23 times.

We live in times of data: the Big Data era. People often compare data in the twenty-first century to oil in the eighteenth century: an immeasurably valuable but still largely untapped source of opportunity. And as with oil, it will be a long process of first recognizing the value of data, then learning how to mine it, then later how to use it and profit from it.

Now: Because It Finally Works

All these developments – the high computing power, storage capacity, communication speed and data growth – have combined to create the perfect conditions for the rapid progress of artificial intelligence. It will, in all likelihood, continue to evolve rapidly, and if companies don't start adapting their sales organizations soon, the potential gap will only widen. Just as with oil, there will be those who are the first to recognize the fundamental value of data and will be hugely rewarded for it, many others will fall by the wayside.

1.2 Why Not in SMEs?

We can already follow this development live. The GAFA companies (Google, Apple, Facebook, Amazon) have long recognized this potential and are now profiting from it every day. Among other things, this is also the reason for their success. Sad, but true, that here too, the big ones are quite a bit ahead of the small ones.

SMEs are lagging far behind, and there is really only one reason for this: ignorance, which is the biggest obstacle to the use of AI in companies.

Although many different barriers to enterprise AI adoption are identified by experts – such as lack of data, data quality, processes, expertise, cost, lack of strategy, privacy, cybersecurity, ethics, etc. – the main reasons for the slow adoption of AI technology in the midmarket are lack of understanding, trust and resources.

The Top Three Obstacles for AI Adoption in Companies

- Lack of understanding of the added value of AI technology
- Lack of confidence in AI technology
- Lack of resources and budgets to implement AI technology

The main barrier to enterprise AI adoption is the lack of understanding about the technology and its potential to solve business problems. Most executives view AI as a buzzword that is difficult to connect to actual business problems. Aside from its myth backstory that AI will eventually take over the world, most of us don't know what this technology can do for our own businesses. So this combination leads to AI just seeming out of reach for smaller businesses. Businesses feel like the topic is too far removed from their reality. However, this is a misconception.

The second obstacle lies in the lack of trust towards the machines. AI is highly polarizing and the subject of heated debate. There are concerns about how this technology will affect everything from our jobs to our humanity. Questions are constantly raised about the extent to which we can trust this new wave of artificial intelligence. So these doubts are also reflected in the willingness of companies to embrace AI technology.

The third barrier is based on the belief that AI is too expensive and too complex to deploy. There is a general assumption that high investments as well as many top-class specialists are necessary to implement AI. This is also a misconception, as

there are now many vendors that offer ready-made solutions that can be deployed without much effort and resources.

- All these obstacles have one thing in common: they are in fact false conclusions that arise because of ignorance.

In the next chapters (Chaps. 2, 3, 4, 5 and 6), these misunderstandings and ignorance will be cleared up so that even the smallest companies dare to implement AI. Because even there, it can reveal many new potentials for business growth or increased efficiency in sales.

It's simply not fair that only the big players are benefiting from this technology, and it's high time that SMEs also start closing the potential gaps in their organizations, because that's the only way they'll survive in the long run. The truth is that AI can be implemented in certain areas more easily and quickly than most companies assume. It's just a matter of acquiring the necessary knowledge.

Don't make the thinking mistake that many do: AI already offers real-world applications today that can help you increase sales and revenue and reduce costs – more or less as of now, and for little money, too.

1.3 ANI, AGI, ASI: The Terms Behind the AI Myth

Let's start with the first obstacle and demystify the term AI.

Artificial intelligence is the idea that we can program computers to perform tasks that would normally require human intelligence. It's an incredible idea in theory, and to understand it we first need to look behind the scenes at the different AI terms.

► **Definition** In AI, a distinction is made between:

- **ANI – Artificial Narrow Intelligence:** algorithms that can perform individual tasks well
- **AGI – Artificial General Intelligence:** Can do everything humans can do
- **ASI – Artificial Super Intelligence:** An intellect far more intelligent than the brightest minds of mankind and superior to us in practically everything.

Even though AGI and ASI have taken pride of place in our imaginations, in truth ANI is the only form of Artificial Intelligence mankind has created so far. It can win against the chess or Go world champion, steer autonomous vehicles, control industrial applications, predict the weather for us, make purchase recommendations, and speak from smart speakers like Siri and Alexa. ANI is able to come close to and even surpass isolated human abilities in very specific contexts, but only in very controlled environments and with a limited set of parameters.

AGI, on the other hand, is the kind of artificial intelligence that can understand its environment as a human would. Even though it seems like AGI is ready to enter our lives at any moment, it is still a theoretical concept in itself. The more we look into AI, the more we realize that this idea is difficult to implement. Experts say we'll need another century to create AGI.

With ASI, we are entering the realm of science fiction: it would have the potential to become more powerful than anything our planet has seen before. This idea inspires experts, researchers and ethicists to discuss it and makes for heated debates and highly exciting Hollywood interpretations. But the reality is that, as things stand, ASI is even vaguer than AGI and lies even further off in the distance.

► **Definition** Basically, you can also differentiate the three types of AI like this:

- **ANI – Machine Learning**
- **AGI – Machine Intelligence**
- **ASI – Machine Consciousness**

Based on this consideration, it becomes clear that behind the term AI, which implies human intelligence, there are “only” algorithms that learn on their own. Therein also lies their so-called intelligence. But artificial intelligence today is still far from intelligence as we understand it, or even consciousness. Any kind of machine intelligence that surrounds us today is an ANI. It may be called “weak AI”, but it is the only AI that exists today. It is neither conscious, sentient, nor driven by emotion, and in truth is not even remotely close to a human intelligence.

1.4 ANI: The Weak but only AI

Cortana, Alexa, Siri and other natural language processing applications are examples of ANI and may give the impression of being intelligent because they can interact with us and process human speech. In reality, however, ANI only operates within a predetermined, predefined domain and cannot think for itself.

Although we call ANI “weak” AI, we should not take it for granted because it is a great achievement of human innovation and intelligence and offers tangible and real opportunities to discover new business potential.

When it comes to processing data quickly and error-free, AI systems have long been superior to us humans. With this capability, ANI has enabled us to improve overall productivity, efficiency and also quality of life. Moreover, it has taken away a lot of boring, routine, mundane tasks from us, thus improving our lives significantly, which is why we should not underestimate it.

Examples of ANI

- Search engine results: *Google search algorithms*
- Weather forecast: *Watson from IBM*
- Facial recognition software: *passport control machines at the airport*
- Email spam filter: *Gmail, Spark*
- Social media feeds: *LinkedIn, Facebook*
- Virtual assistants: *Siri from Apple, Alexa from Amazon, Cortana from Microsoft*
- Buying recommendations: *Amazon, Zalando*
- Self-driving cars: *Tesla, Volvo*
- Translation Services: *DeepL, Google Translate*
- Streaming services: *Spotify, Netflix, YouTube*
- Navigation services: *Google Maps, Apple Maps, Uber*

As you can see, behind the most common AI applications is the ANI. Whether we're communicating with our smartphones, surfing the web, shopping online, spending time on social media, checking the weather, or navigating to the office ... it's ANI that makes our lives more convenient and influences our decisions in one way or another.

To understand it better, we need to go a step deeper in terminology: ANI essentially falls into two categories – symbolic AI and machine learning.

1.4.1 Symbolic AI

Symbolic AI, also referred to as GOFAI - good old fashioned artificial intelligence – has been the dominant area of research for most of AI's history. And although it has fallen somewhat out of favor in recent years, while other AI areas, such as Deep Learning, are experiencing hype, most of the applications we use today are rule-based systems.

► **Definition Symbolic AI** requires programmers to meticulously define the rules that specify the system's behavior. Symbolic AI is suitable for applications where the environment is predictable and the rules can be clearly defined.

1.4.2 Machine Learning

Machine learning, the other branch of ANI, develops intelligent systems using examples. A developer of a machine learning system creates a model and then “trains” it by providing it with many examples. Based on existing data sets, the algorithm recognizes patterns and regularities and independently develops appropriate solutions.

► **Definition Machine Learning (ML):** Algorithms that analyze data, learn from that data, and then apply what they learn to make informed decisions. The intelligence of the programs lies in generating new “artificial knowledge” from existing experience.

In reality, algorithms do nothing but learn and predict possible outcomes based on existing data. If you train an algorithm with thousands of bank transactions and show it the correct outcome for now (real or fraudulent transaction), then the machine learns to predict itself in the future whether a new, unknown bank transaction is fraudulent or not.

Example

A good example of a machine learning algorithm is a music streaming service like Spotify. In order for the service to make a decision about which new songs or artists to recommend to you, the ML algorithms map your preferences to other users with similar music tastes. Based on that, they decide what to recommend to you.

Unlike symbolic AI, machine learning algorithms are able to replicate the kinds of behaviors that cannot be captured by symbolic reasoning, such as recognizing faces, images, and voices, the kinds of skills we learn by example.

1.4.3 Deep Learning

And this is where *neural networks* come into play. These are multi-layered structures that learn from a lot of data and form the basis for Deep Learning: a special form of machine learning that has become particularly popular in recent years.

► **Definition Deep Learning** structures algorithms into multiple layers to create an “artificial neural network” that can learn on its own and make intelligent decisions.

The structure of an artificial neural network is inspired by the biological neural network of the human brain and enables a learning process that is far more powerful than standard machine learning models. Technically, Deep Learning is Machine Learning and works in a similar way, so the terms are sometimes confused. However, the capabilities of Deep Learning differ.

A deep learning model is designed to continuously analyze data with a logical structure and draw conclusions from it, similar to a humans. To achieve this, deep learning models use a multi-layered structure of algorithms called artificial neural network. The more layers that are built, the “deeper” and also more powerful the program is.

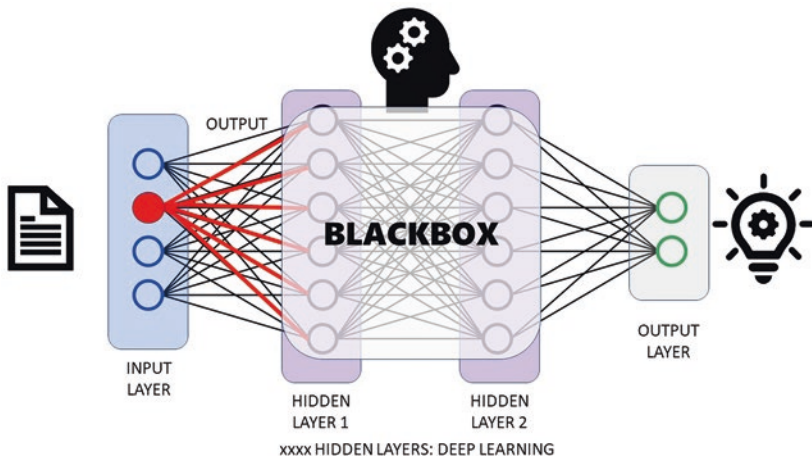


Fig. 1.2 Functionality of neural networks

Basically, raw data is provided and the machine is supposed to generate the result itself, regardless of whether the expected outcome is given or not. That is why we talk about a black box here: Input and output are known, what happens in between, only the machine knows (see Fig. 1.2).

Deep Learning is particularly well suited for performing tasks where the data is unstructured, such as computer vision, natural language processing, and image processing.

It is important not to overestimate the general hype about Deep Learning. Because in reality, Deep Learning represents only a very small part of Machine Learning, and Machine Learning in turn represents only a small part of AI. In practice, most AI programs are rule-based systems of Symbolic AI.

1.5 How Do Algorithms Learn?

The answer to this question is simple: just like children. Just like a child learns from experience, algorithms learn from their own experience (analysis) or from the data provided. Just like children, they are initially supervised and helped to learn.

Example

First the child has to see several cats and be told that this is a cat, until eventually he himself recognizes a cat in different environments. Also when riding a bicycle, we show the child where the pedal is, how to pedal and support him until he can ride stably by himself. In the next developmental step, the child begins to learn by himself: here the child is rewarded by parents and at school for good results and punished for bad ones. And later, adolescents are basically left on their own: We let them have their own learning experiences, and some of it will surprise us parents and point out things we didn't know existed. In the whole process of learning, we guide and support the child, but have no idea how his brain really learns.

Machine learning algorithms work in a similar way because they are self-learning. This means that the machine puts the algorithms together itself, and it is impossible for the programmer to understand how this happens. Even though they get better and better with training time, machine learning models still need some guidance. If an AI algorithm produces an inaccurate or incorrect result, a human must step in and make adjustments. In a deep learning model, an algorithm can determine for itself, through its own neural network, whether the result is accurate or not.

Similar to the described learning types of children, Machine Learning is distinguished between Supervised, Unsupervised and Reinforcement Learning.

► Definition

SUPERVISED Learning: Results that the machine should produce are predetermined. The machine is trained to produce correct results given new data.

REINFORCEMENT Learning: Machine is rewarded for correct results and punished for incorrect ones. The machine learns to react correctly.

UNSUPERVISED Learning: Results are not predetermined. The machine recognizes patterns in the data on its own.

In a *supervised learning model*, you train the machine using data that is “well labeled”. With the label, you initially show the machine the correct result. This teaches it to produce the correct result itself later.

In *reinforcement learning*, the machine is trained to make a sequence of decisions. It tries to find a solution to the problem according to the principle of trial and error. In this process, the programmer trains the machine on the carrot-and-stick principle to learn which outcome is correct. The machine’s goal is to maximize the total reward.

In an *Unsupervised Learning model*, the machine is not supervised. One “feeds” the machine with data and leaves it to recognize patterns by itself. This makes it possible to discover new and unknown patterns that might otherwise not have been recognized (see Fig. 1.3).

Further technical explanations of AI and how it works will not be given here. For the purpose of this book, this information is sufficient as background, and if you are interested, there is enough further literature. At the risk of creating resentment among AI experts, it should be said in conclusion that as a sales manager or

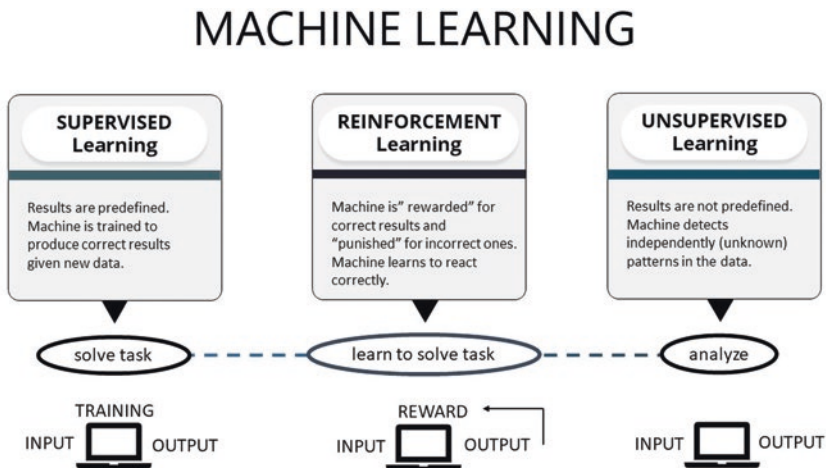


Fig. 1.3 Types of machine learning

executive, you do not necessarily have to understand how AI works technically in order to be able to use it and profit from it.

What's really important is to recognize the potential of AI for your own sales organization. Because that is where its true added value lies. Which we will deal with in the next chapters.

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Benefits: What AI Can Do for Sales

2

Abstract

Artificial intelligence is the perfect answer to many challenges of modern sales. Its numerous advantages can be summarized on several levels: It not only generates new business opportunities and enables a better understanding of customer needs, but also takes over manual tasks and increases the productivity and effectiveness of sales and planning activities. With its diverse analysis options, it generates useful insights from data, makes them available to sales independent of time and location, and even makes concrete recommendations for action to achieve goals. It accesses diverse data in different systems and transforms it into a valuable source of information for sales. In this way, it solves one of the biggest challenges facing sales in digital times: the high volume of data, which is difficult to manage.

Sales has changed more in the last five years than it did in the last ten, and more in the last two than it did in the last five. But the reality is that sales organizations, especially in the SME sector, still operate as they did 20 years ago, even though sales technology is very advanced. That should no longer be the case today.

Technology offers new, until recently unimagined opportunities to streamline sales processes and unlock new business opportunities. In sales, AI is considered the most advanced and fastest-growing technology for the coming years.

2.1 AI: Capabilities and Limitations

AI can analyze vast amounts of data at a previously unimaginable speed, identify patterns, trends and correlations within it, draw valuable insights from it and provide sales with a better basis for decision-making and action. It also gives sales access to previously inaccessible data outside of their own corporate structures and enables the organization to reach faster, better and more customers, as well as to serve existing customers more effectively.

In its ability to quickly process, analyze, evaluate data and recognize correlations in it, it is already partly superior to the human brain. It also functions without fatigue and is able to react within fractions of a second and deliver accurate results. It analyzes different types of data from various sources and generates relevant information from it for sales. Therein lies one of its greatest benefits for sales organizations.

The limitations of AI systems lie in their direct interaction with humans. Currently, AI systems do not possess emotions, empathy or social intelligence. That's where they don't even come close to human intelligence. Even though AI can now process natural language and communicate with customers on its own to a certain extent, it is far inferior to humans in its ability to communicate. As long as it does not develop empathy, it will not become a competitor for humans.

AI is constantly evolving, literally, which is its biggest advantage compared to regular software. Not only is the AI technology itself evolving, but also the respective program in its specific area of application. Because every new piece of information that the program receives makes it better. Compared to traditional software, AI-based tools continue to learn on their own and become more reliable over time and with the higher amount of data available. They learn and produce more accurate results with each new fraction of information they process.

2.2 AI: The Solution for the High Volume of Data in Sales

In our digital world, sales is not spared from the high volume of data. In fact, sales organizations are becoming more and more data-driven. Therein lies one of the greatest opportunities and at the same time one of the greatest challenges for sales. Data is the future gold of the sales organization, but it is usually still buried somewhere deep and inaccessible. While we generate tons of data today, frontline salespeople often still have to deal with data that isn't up-to-date, isn't accurate, or isn't relevant.

Most sales organizations face the challenge of extracting meaningful insights from their customer data and are bogged down in disparate data feeds. Data is intangible, not shared efficiently, and ends up sitting somewhere unused.

Often work is done in silos. Different and inconsistent systems are used, with conflicting goals. The classics here: Sales, Service, Call Center, Product Management – all pursuing their own interests. In many cases, employees in one department don't even know their colleagues in other departments, let alone have access to relevant customer data across departments. This often leads to customers getting the impression that the company is fragmented, unfocused, and that different departments have self-serving agendas. Often, the customer gets stuck between conflicting interests.

Sales needs help getting to the data gold, and AI can be the leprechaun here, guiding us to the end of the rainbow where all the gold is to be found. The difference being that AI isn't stingy and gives us access to more data than we can imagine or know to want. The fact is that AI can make data tangible and useful to sales:

- ▶ AI can provide the right data to the right sales rep at the right time.

As such, it makes a significant contribution to sales success and is becoming a soon-to-be irreplaceable sales resource in today's data-driven world (see Fig. 2.1).

AI is the perfect answer to the data tsunami we are dealing with in sales today: Customer data, transactional data, process data, interactions, tracking, analytics, performance, activities, communications, documents, contracts, news, etc. It can not only handle the high volume of data, but also increase the quality of the data, ensure it is up-to-date, and provide access to it anytime and from anywhere. Basically, AI solutions use internal data sources such as CRM, ERP and various other systems, but also external data sources such as news sites, customer websites



provide relevant information at the right time in the right context

Fig. 2.1 AI data streams in sales

and social media, and merge the various confusing data fragments into a valuable source of information.

AI systems analyze large data sets, but their added value lies not only in pure data processing. AI gains insights from data: it can process and analyze millions of data in a very short time and recognize correlations in them that often remain hidden to humans. From this, insights are derived and used to make predictions, recommendations and decision options for sales.

Machine learning systems can be trained with existing data to the point that they produce results on their own with completely new data sets over and over again. In the process, the system gets better with time because it learns what works and what doesn't each time.

This means that a sophisticated AI system can:

- identify potential new customers,
- analyze customer and prospect data,
- monitor customer interactions with the company,
- make predictions about customer behavior,
- calculate probabilities of a deal close,
- recommend the next steps in the process and optimal sales actions,
- test customer-specific product configurations,
- select complementary products,
- calculate the best price,

- determine the most attractive sales terms,
- check the terms of the contract,
- communicate with the customer at the right time via the right channel and
- much, much more ...

In short, AI offers many opportunities to faster achieve or even exceed your business goals. The prospects are vast, and within them are options for every company, regardless of its size, industry, or scope of operations.

2.3 Advantages of AI for the Sales Department

Tomorrow's sales organization needs more than traditional sales skills to continuously achieve its goals. It needs to understand what technological capabilities are available to it and how it can benefit from them to achieve better business results. AI comes first here, as it is one of the most promising technologies for sales and is considered by experts to be the technology of the future for sales. It offers numerous benefits to sales organizations that can be grouped into five overarching categories.

1. AI frees sales staff from repetitive and administrative tasks

AI systems can take over administrative, repetitive, and manual tasks, allowing salespeople to focus purely on sales-related activities. For example, it can automatically record contacts, leads, accounts, emails, phone calls, meeting reports and calendar information in the CRM. On the one hand, this reduces manual effort, and on the other, it ensures that sales teams always have up-to-date and accurate customer data.

- Essentially, AI can take over all the unpopular tasks in sales – data entry, data processing, planning, forecasting, analytics, and research – freeing up sales resources for direct customer interactions.

Data collection, reporting and creating any kind of analysis is the last thing a good salesperson wants to do, and should do. With AI software, all team members from various departments can access real-time analytics and information without the hassle of creating reports or waiting impatiently for them. This way, the entire organization – marketing, product management, purchasing, finance, service, and sales – is better able to coordinate its efforts, and sales has more time to do what’s most important: close deals.

2. AI generates new business opportunities

Even though AI can automate processes in the company very well and thus free up valuable resources, the use of AI in sales is not just about automation. Used wisely, AI goes far beyond that. A major added value of AI is to generate new business opportunities and to increase the closing probability of existing opportunities.

AI can be integrated into sales structures as a virtual member and autonomously identify buying signals, pay attention to customers, find new leads or recognize up- and cross-selling opportunities. It autonomously generates new business opportunities and thus makes a significant contribution to sales success as part of the organization.

AI not only brings new opportunities, but also helps employees close them. For example, AI will alert the sales rep about the optimal transaction timing and need for action on the deal. Moreover, it will continuously notify the sales rep on the most important deals and give clear instructions on what to do next in the specific case. This will ensure that the sales rep does not miss the optimal time to act and what to do next.

- ▶ AI identifies business opportunities within existing customer bases as well as outside the organization.

AI algorithms continuously evaluate sales transactions, customer behaviors, and interactions and can derive recommendations to grow business with existing customers. Additionally they identify new opportunities by region, product, customer and market segment, sorting and prioritizing them for team members.

3. AI creates a better understanding of your customers and their needs

AI enables you to better understand your customers. It doesn't overlook any of your customers' interactions with your business, and as a result, it can better predict customer needs than has ever been possible before. By collecting data from multiple sources and various customer interactions with your brand, it empowers your sales and marketing to create a highly personalized and memorable experience for each individual customer.

AI makes a highly personalized customer approach for each individual customer feasible: whether in the form of emails, via chatbots, via the website or with advertising content. This is based on the individual interests and preferences of the respective customer – let's call him Hans – which are identified by AI based on his behavior. The algorithms predict when and on which platform the chances of reaching Hans are greater, and what you should do differently if you want to target Hanna.

The potential of AI for marketing and improving the customer experience is huge. AI-based analytics reveal how differently similar people react to the same message and how their reaction could be positively influenced with a small adjustment to the content.

- AI systems allow you to not only understand and analyze your customers' needs much better, but to keep up with those needs continuously changing.

Our customers' needs are never static, they are constantly changing and AI can track this evolution and enable us to respond properly and in a timely manner. What's more, AI can not only identify these needs, but even anticipate them and create a tailored customer experience.

A company that recognizes and leverages the potential of AI in its marketing efforts will be able to provide a better customer experience to its customers because it will be able to:

- quickly recognize changes in customer behavior using a dynamic target customer profile and to react to them correctly,
- automatically customize the customer journey for each individual customer,
- make the optimal offer to the respective customer at the right moment,
- address the customer with relevant and personalized content.

In summary, AI enables companies to better listen to their customers, truly understand their needs and keep up with the evolution of their expectations. As a result, they can develop and offer products and services that are always relevant and useful to their customers.

4. **AI makes your sales people better**

AI empowers salespeople to become better at their jobs by helping them to:

- prioritize their tasks more effectively,
- not overlook important things,
- understand customer needs more thoroughly,
- track customer interactions,
- identify trends in customer shopping behavior,
- select suitable products and services for customers,
- work out optimal offer and price strategies and
- address customers individually.

- AI empowers sales reps to do their jobs better by providing relevant insights and recommendations in a timely manner, and helps them achieve their goals faster and better.

For example, it can prioritize sales activities based on their importance and relevance and consequently increase productivity by not wasting time on unimportant activities. The salesperson always knows what has the highest priority and also gets suggestions for improving its interactions with customers. For example, AI algorithms might determine that sending a follow-up email three weeks rather than three days after the initial contact with a prospect would be more favorable. Or they might determine that sending a particular document (product information, presentation) or piece of information (blog article, demonstration video) increases the probability of converting that prospect into a customer.

AI evaluates historical data from numerous customers, taking into account their recency, and can identify an incentive, discount, or contract terms that worked well

for similar deals. This way, the salesperson needs less working time to determine the best pricing strategy and the probability of closing the deal increases. AI-based price optimization models work in a similar way: AI algorithms identify the optimal selling price based on many more criteria than the traditional cost-plus-basis allows. This can greatly increase sales profitability.

In addition, AI can simplify complex B2B processes by taking on a guiding role in the process, guiding and supporting sales reps through the right steps, for example in product and quote configuration or supporting legal contract negotiations.

5. AI enables better forecasting

With accurate forecasts, sales organizations can better achieve their goals, allocate resources adequately, distribute budgets specifically and define sales territories precisely. Accurate forecasts form the basis of good sales management.

But what is the reality in most companies? How does the forecast process work today? Sales managers hold weekly meetings and ask their employees about the current situation or their sales estimates for the coming periods. Based on this, they make their own estimate. The fact is that these forecasts are based on the opinion, estimation and intuition of individuals and this becomes a problem when salespeople get their estimates wrong or even adjust them in their own interest. And if they actually miss their forecasts, it can have serious consequences for the entire company.

- ▶ AI brings the longed-for solution when it comes to making accurate forecasts. It enables companies to better plan production capacities, procurement, resource allocation and investments.

With AI, sales managers no longer have to estimate their teams' numbers themselves. Instead, they can rely on algorithms to predict sales with a higher degree of accuracy resulting from key data about customer interactions. In addition to taking historical data into account – traditional forecasting methods tend to rely solely on historical data – AI predicts future trends. By predicting the closing probability of all open deals, AI is able to generate accurate revenue forecasts. It takes into account a variety of different criteria and metrics, constantly adapting them to changes and continuously improving its predictions, recommendations and decisions as it generates more of them.

The more accurate the forecasts, the better management can decide where to allocate their resources and bring any risks to management’s attention in a timely manner. Moreover, the sales force itself benefits because with accurate forecasts in their sales territories, sales reps can manage their sales activities to better achieve their individual goals. From an unpopular task, forecast planning is transformed into an important tool for sales reps in achieving their sales goals.

2.4 AI Analysis Capabilities

The distinct strength of AI lies in its ability to process data. To this end, it offers various options for analyzing data and generating insights from it, whereby different analysis methods (analytics) are used. Different analytics methods are needed to answer specific questions (Fig. 2.2).

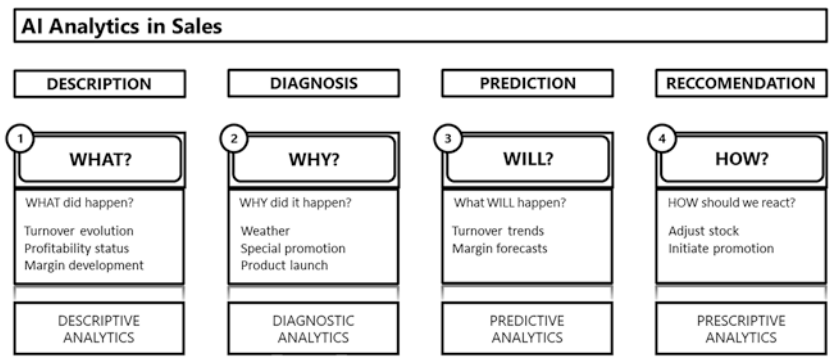


Fig. 2.2 Levels of AI analytics

Nearly a decade ago, Gartner published its Analytic Ascendancy Model, which classifies different analytics methods into four categories (Gartner [n.d.](#)):

- **Descriptive Analytics – Looking into the past: *What happened?***
 - **Objective:** past-related evaluation of data in order to understand possible effects on the present.
 - Descriptive analytics identify certain developments in past periods, such as a decline in sales or an increase in margins.
 - Descriptive analytics finds out what happened, but cannot explain why it happened. For that, we need diagnostic analytics.
- **Diagnostic analytics – Ascertaining the background of what happened: *Why did something happen?***
 - **Objective:** To understand what has led to developments in the past: Reasons, effects, events and their consequences, as well as trends.
 - Diagnostic analytics takes a closer look at data by juxtaposing historical data with other data to get a better look and identify causal relationships. Depending on the context, answers to questions like “Why is sales lower than last year?” or “Why is customer X’s margin suddenly so high?” can be found.
 - While diagnostic analytics identifies the causal relationships for what happened in the past, it can only offer limited actionable insights for future developments. This is where predictive analytics come into play.
- **Predictive Analytics – Looking into the future: *What will most likely happen?***
 - **Objective:** Predictions about possible future developments.
 - Predictive analytics predicts what is likely to happen in the future: Sales and revenue forecasts, demand forecasts, sales trends, etc. For example, based on available data, it can predict how the demand will most likely develop over the next periods. These insights can be very useful for planning of raw material procurement or production capacities, for example.
 - Predictive analytics is able to predict future trends with a high degree of probability, but it is the prescriptive analytics that provides recommendations on how to support or counteract the trends for the purpose of achieving business goals.

- **Prescriptive Analytics – Recommendations for action: *How must action be taken in order to achieve certain results?***
 - **Objectives:** Recommendations for action to achieve desired outcomes
 - Prescriptive analytics builds on the results of predictive analytics, but it does not simply predict what might happen. It evaluates the most favorable scenarios and suggests what actions need to be taken to achieve a particular favorable outcome. It uses a feedback system to learn from the relationship between prescribed actions and their outcomes and to improve them in the future.

Advanced Business Intelligence tools have many of these analytics capabilities. But only AI-based systems can reach the level of prescriptive analytics that alone can understand the complexity of changes in customer behavior and market trends, enabling companies to extract insights from their data and turn them into promising strategic actions.

Example

Predictive Analytics to Identify Up-Selling and Cross-Selling Opportunities in B2B Manufacturing

The sales strategy of a manufacturer of B2B hardware products is focusing on targeting of specific key customers. The sales force generates about 50 new opportunities per month with varying order volumes. Sales in recent years have grown healthily, but the cross-selling and up-selling potential with existing customers has not been exploited.

To address the issue, the company decided to deploy a predictive analytics solution, while also improving the management and closing of new opportunities. The software accessed ERP data, automated sales analytics, identified sales trends, and created powerful forecasts.

This enabled the visualization of hidden business opportunities within the existing customer base and allowed key account managers to directly identify cross-selling potential. At the same time, employees were able to better manage all of their opportunities, resulting in a 15% increase in productivity across the organization. The cross-selling volume was increased fivefold and furthermore

the average volume in Euro per opportunity was increased by approximately 12%. In addition, the increase in sales efficiency reduced the need to hire new key account managers.

2.5 From the AI Revolution to the Sales Revolution

When we think of revolution, we usually think of rapid change and fundamental realignment, often accompanied by dramatic and violent activities. But there is also the silent revolution, which happens in secret and does not take place suddenly, but which therefore brings no less power for change. Even if we usually think of AI as a dramatic uprising and world conquest by robots – think *I, Robot* – the true AI revolution is slower and rather silent. That doesn't make it any less radical or significant, quite the opposite.

AI has long since penetrated many areas of our consumer lives unannounced and imperceptibly, and similarly it will happen in sales. Artificial intelligence is revolutionizing sales on several levels and thereby driving the evolution of sales. It enables the enhancement of sales performance, extracts the expertise and conserves the know-how of the organization and supports the strategic sales management approach. Thus, AI takes the sales domain to its next evolutionary stage, where sales operates more efficiently, effectively, competently, and sales leadership can make more informed decisions to better and strategically manage sales. These areas of change can be summarized into four dimensions: Efficiency, Effectiveness, Competence, and Strategy (see Fig. 2.3).

2.5.1 Efficiency: Increasing Sales Productivity and Performance

An estimated two-thirds of a salesperson's time is spent on activities that distract from actually selling: gathering data, writing emails, writing reports, researching and searching for information, coordinating appointments, and sitting in internal meetings. AI can automate most of these tasks – with the exception of attending meetings – and relieve sales of the manual and repetitive tasks.



Fig. 2.3 Four dimensions in which AI is revolutionizing sales

In addition, it is able to sort the tasks that it cannot perform itself after all and prioritize them for team members according to their importance, so that sales can focus on the relevant topics only. By providing access to up-to-date and in time qualitative sales information it considerably reduces the time required for information search and gathering. In addition, AI can automate the time-consuming lead researching and lead generation process and accelerate inefficient administrative processes.

- ▶ AI increases productivity in the organization, enables greater efficiency in operations, standardizes processes, and shortens sales cycles. All of this inevitably results in higher sales performance.

Thanks to its ability to enhance and improve sales performance, McKinsey analysts estimate that AI has the potential to value \$1.4 to \$2.6 trillion in the area of marketing and sales in the coming years (Chui et al. 2018).

- ▶ AI boosts sales productivity and efficiency, thereby increasing the overall sales performance.

2.5.2 Effectiveness: Patterns of Success to Enhance Performance

While increasing sales productivity and efficiency is one of its greatest accomplishments, more importantly, AI can positively impact sales effectiveness. Because there's an important difference between efficiency and effectiveness: sales efficiency enables salespeople to do their jobs faster and more efficiently, but sales effectiveness goes a step further by empowering salespeople to both improve the quality of their interactions with customers and explore new business opportunities faster.

AI can increase sales effectiveness on two levels. On the one hand, it can take on a kind of business development role because it analyzes existing and past business relationships and discovers new valuable business areas and opportunities in them that would otherwise have remained unexplored. It uncovers what is hidden: developments and trends, cross-selling opportunities, customer churn risks, customer behavior or preferences. With this knowledge, sales can generate more business more easily.

On the other hand, AI not only recognizes new opportunities, but also generates individualized recommendations for each sales employee on how to deal with each case. For example, it would calculate the purchase probability in a specific customer case, also explain the background of this decision and make explicit suggestions and recommendations for dealing with the customer, such as price and terms recommendations or product configuration, and even suggest the appropriate language style, the preferred communication channel and the optimal timing for contact.

- ▶ AI-generated insights and recommended actions empower sales reps to interact with customers in the right way at the right time.

Consequently, the sales effectiveness of the individual employee and also of the entire organization increases, which leads to higher sales and earnings and exponentiates the overall sales success.

- ▶ AI discovers patterns of success and positively influences sales effectiveness, thus increasing the overall success of the sales organization.

2.5.3 Competence: Conservation and Transfer of Know-How

What sales manager doesn't know the fear that their best salesperson could leave for the competition at any time? AI can attenuate this fear, because it solves one of the biggest problems in companies: the conservation and transfer of know-how. It enables a goal-oriented and efficient exchange of experience within the organization, bundles the entire sales know-how and reduces the risk of information loss due to the quitting of individual sales employees. This is because the knowledge is retained at the level of the organization and is not dependent on individual employees anymore. This also enables new employees to integrate more quickly and effectively.

- ▶ AI discovers success patterns of individual employees and the entire sales organization, thereby reflecting the cumulative experience of the organization and deriving concrete recommendations for action for individuals.

In this way, the individual employees improve as well as the entire organization. Furthermore, it not only bundles the entire organizational competence, but also enhances it by adding new knowledge. For example, it discovers and filters relevant news about the market and customers: Publications, analyst reports, quotes from executives, new product releases, expansion plans, acquisitions, PR announcements, etc. It can identify potential decision makers (via LinkedIn scans), discover relevant posts – old or new – from targeted leads, and suggest specific content to use in the sales process. Just as AI is constantly learning, it also empowers the organization to constantly improve, and the idea of a learning sales organization is becoming reality.

Basically, the reason for success of a sales organization is the correlation between the accumulated competence, experience and intuition of its individual employees and the strategic orientation of the overall company. The organization can only be as good as its specific members are individually and in interaction with each other. And this is what AI can promote: it identifies, promotes and conserves know-how within the organization and thus enables individual employees to develop needed competence more quickly and easily. Consequently, individual competence and also the overall sales competence across the company increase.

- ▶ AI enables the conservation and transfer of know-how within the sales organization, thus increasing the organization's overall competence.

2.5.4 Strategy: Potentials for Strategic Sales Management

Ultimately, AI is becoming an irreplaceable decision-making resource for sales management. Not only can it improve planning activities – whether forecasts, budgets or resource allocation – but it empowers executives to make better decisions. After all, to properly manage sales these days, you need access to relevant data: You need to know where you stand, how the market is developing and what options the company has in order to make seminal decisions based on more than just intuition and experience. AI holds a real treasure here because it can predict future developments based on data, facts and customer behaviour. Imagine being able to combine these factors: the personal experience and competence of the management with fact-based trends and developments as well as predictions about customer behavior ...

AI technology makes this beautiful notion possible. It helps sales management better manage sales by providing valuable information: Target achievement and forecasts, individual reps performance, lead conversion rates, customer and product performance, territory performance levels, sales cycle length, market developments and trends, customer behavior, customer needs, changes in customer perception, etc.

AI provides insights into past events, identifies future trends and questionable anomalies, recognizes changes and developments across the entire sales process, in its every single step. In this way, it makes it possible to examine the sales process holistically and discover optimization potential in it. As a result, management no longer has to concern itself with obtaining relevant data, but simply uses the insights gained from it and can focus on strategic activities. Consequently, AI supports the strategic sales management approach and empowers the organization to achieve its goals faster and execute the strategy better. It also provides the opportunity to identify the need for change in a timely manner.

- ▶ AI discovers optimization potentials and supports the strategic sales management approach, thus enabling the execution of the sales and corporate strategy.

The AI revolution in sales does not happen overnight, it takes place as a slow, steady and rather silent evolution and sustainably changes several areas, at different speed levels and in different characteristics. With this, sales activity is also evolving to a new stage of development that is much more efficient and effective and even much more fun.

Conclusion: AI revolution leads to sales revolution.

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Relevance: How AI Supports the Sales Process

3

Abstract

Artificial intelligence offers a brave new world of opportunities to optimize sales across the entire sales process. There are numerous tools and vendors that can support all processes in sales: from lead generation and qualification, deal management and customer communication to account management and business development.

With its diverse application possibilities, AI can support the entire sales process and offers diverse optimization tools for each individual step in the process. Figure 3.1 shows the range of different applications that can be used in the respective phases of the sales process.

3.1 Lead

Lead Generation

At the very beginning, there is the lead generation, which is one of the most important, but also particularly challenging steps in the sales process and takes up a significant amount of a salesperson's time. Remember, how it used to be: salespeople visited exhibitions, trade fairs and conferences, researched, wrote acquisition

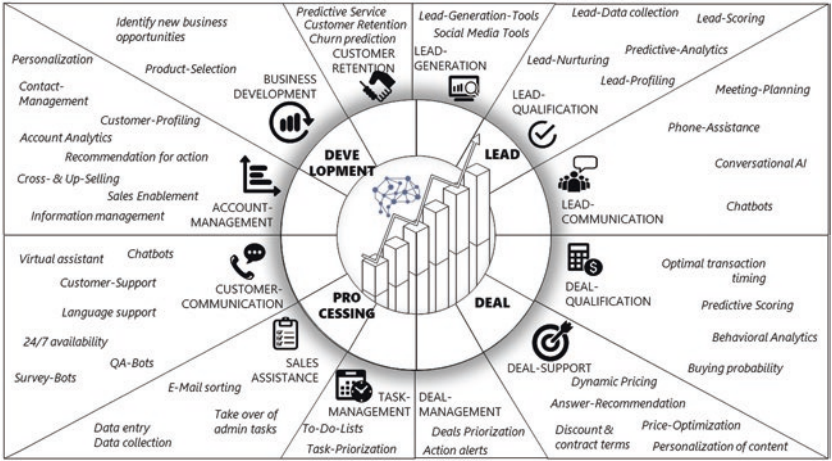


Fig. 3.1 AI in the sales process

emails and called potential customers. Today, technology, and AI in particular, allows us to automate and improve the laborious process of lead generation.

For example, AI search bots can take over the time-consuming research work and autonomously identify leads in the digital space, allowing sales reps to focus purely on interacting with those leads rather than on their search. Tools like Frux, Leadfuze, and Node use AI to discover new potential customers in the digital space. Such systems search the internet for connections between people, companies, products, and places and discover leads that have a high likelihood of converting into customers.

There are also bots that specialize purely in social media. A good example of this is LinkedIn Sales Navigator, which identifies potential leads on LinkedIn and helps you connect with them. The system uses algorithms to generate lead recommendations for its users. There are also other search bots that work similarly, such as Seamless.AI. These bots can not only identify thousands of leads in seconds, but also qualify and prioritize them. This leads us to the next phase in the sales process: lead qualification.

Lead Qualification

This is where so-called predictive lead scoring tools come into play. These AI-based tools evaluate and monitor historical data related to the prospect's interac-

tions with the company in conjunction with other external data sources and signals to predict a particular lead's purchase intent. For example, they can determine if a prospect is actively researching a particular product or solution. Based on these intent and purchase signals, the leads with the highest likelihood to buy are prioritized. Good examples here include Salesforce, Insidesales, LinkedIn Sales Navigator, and Qualifyer.ai.

This frees up sales reps to spend more time on leads that are likely to convert and thus increase sales. Sales teams work with fewer customers who are more likely to convert and close more deals. In the process, the system keeps getting better over time: the more data collected, the higher the quality of predictions, which further improves sales. Sales productivity increases dramatically as a result.

Lead Communication

Here, we have conversational AI at work that can communicate with prospects: Whether via website, social media, email, or messenger apps, AI-driven chatbots answer customer questions, recommend products, communicate pricing, and schedule appointments. Not only can they answer a wide range of questions, but they can also engage in dialogues with leads and ask clarifying questions. And when that lead reaches a certain priority level of lead scoring, the virtual assistant will hand it over to sales reps and categorize it according to relevance and business potential.

Good examples of this are provided by platforms, such as Exceed.AI, which interact with your leads, provide them with relevant information and qualify them.

3.2 Deal

Deal Qualification

Similarly to lead qualification, AI can assist in qualifying individual deals. Again, the software prioritizes each account based on the likelihood of closing the deal and determines which specific solutions and discounts should be offered to the customer. The algorithms develop these recommendations based on past experiences with similar customers or with this one customer.

Based on the calculated purchase probability, the system estimates the optimal transaction time and alerts the seller about it in time. The AI-based deal classification thus offers numerous advantages: Sales teams focus on deals with high closing prospects and thus saves time, costs and resources.

Deal Support

In the next step, when it comes to closing the deal, AI can also provide support. For example, AI-based account analytics can identify the relevant employees of the targeted company and make specific recommendations to the sales rep, such as custom solutions and products that the customer needs or might be interested in because they are specifically relevant to his business. AI algorithms compare this deal to many others, identify patterns that can help the sales rep, and provide them with relevant customer information at the right time. They evaluate historical data from numerous customers, taking into account their recency and suggesting an incentive or discount, among other things, so that the salesperson needs less working time to determine the most appropriate pricing strategy.

In addition, AI-driven product and quote configurators guide sales reps through complex quoting processes, price optimization tools improve their margins and contract management tools support them in legal contract negotiations.

Deal Management

Typically, sales reps get bogged down in a plethora of open deals to manage and often lose track of them, which can result in important opportunities being missed. This is where AI can bring clarity and order to the many opportunities a sales rep must manage. It prioritizes the deals with the highest likelihood to close and directs sales resources to the deals that have the greatest potential to close. This not only improves the close rate, but also increases customer loyalty by always addressing the customer at the right moment.

3.3 Processing

Task Management

In addition to managing opportunities, the sales rep also has tons of other tasks and has to make daily or even hourly decisions about what to focus on. Often, these decisions are based on incomplete information, preferences, and most often, on intuition. AI can ensure that your salespeople don't get caught up in the wrong issues. It focuses their attention on the customers with the greatest potential at the time and ensures that their time is properly invested. It creates to-do lists and prioritizes tasks so that the sales rep always knows what has the highest priority.

Sales Assistance

Every salesperson, especially those in senior positions such as territory managers or key account managers, dream of a personal assistant. AI can make this dream come true: it can take over various administrative support functions and assume a kind of assistance role. It can coordinate appointments with customers on its own, transcribe phone calls, book meeting rooms, automatically enter meeting minutes in the CRM, prioritize emails, identify new contacts and create leads records.

In its assistance role, AI helps sales reps avoid delayed response times, inappropriate recommendations, and unpopular or time-consuming administrative tasks. It can also communicate with customers on its own to a certain extent, or compose email responses for sales reps and personalize the content for the customer.

Customer Communication

AI can go beyond the role of digital sales assistance and even take over a certain part of the sales process. A chatbot can communicate with customers virtually on its own, becoming part of the sales team. It will work to interact with website visitors and convert them into qualified leads. In doing so, it will be available to customers 24/7, always well-rested and in a good mood. It answers questions and provides after-sales support, freeing up valuable sales resources so sales reps can focus on actual sales activity.

3.4 Development

Customer Retention

AI can also increase customer loyalty in another way, namely by identifying not only promising accounts and their opportunities for expansion, but also the at-risk customers who are likely to churn. It detects changes in buying behavior faster than a sales rep usually could, alerts him about it, and also derives a clear need for action. In this way, the sales department can intervene in good time and take measures to retain customers and strengthen the business relationship.

Business Development

Through its ability to identify patterns of success in data, AI can discover new sales opportunities. It not only identifies up-selling and cross-selling opportunities, but also potential business opportunities based on information accessible to it: Account

Analytics, Product Lifecycles, Customer News, Customer Behavior, Competitive Intelligence etc. In this way, it supports the expansion of business, for example, across multiple product categories and business units at the individual customer level. This increases customer loyalty and makes the business more stable and fail-safe.

Account Management

With AI account analytics, you gain relevant insights from customer data and are able to be one step ahead of the customer needs. Algorithms detect buying signals and enable employees to react quickly. Not only that, they identify relevant sales content and determine in what ways and through what channels the potential buyer prefers to engage. They can also identify cross-selling and up-selling opportunities and make specific suggestions to improve the customer experience.

Basically, AI account analytics can promote the consultative sales approach. Additionally, it supports customer orientation of the organization, making customers feel valued due to highly personalized and relevant approach and support.

A good example here is the XANT platform, which uses Amazon-like buyer recommendations to provide insights into B2B buyer behavior.

- **Conclusion:** It is undisputed that AI can already holistically support the sales process today and brings with it many new improving potentials. Thus, sales organizations should begin to leverage the potential of AI for their own processes, because they can only benefit from it. The faster, the better.

Practice: AI Tools and Their Application Possibilities

4

Abstract

In this chapter, the possibilities of artificial intelligence in the sales area are explained in more detail and concretized. For this purpose, the countless AI tools and their application possibilities are summarized in 20 supercategories that are described in detail. You will learn how AI systems can improve the respective sales activities and processes and which concrete application possibilities there are for sales. For each category, examples of tools are given as well as a concrete practical example is described. The chapter is intended to enable you to find concrete possibilities for the use of AI tools for your company. In addition, the goal is for you to get a better idea of the potential that artificial intelligence offers for the sales area, so that you can derive concrete need for action for your sales organization.

We now move into the wonderland of AI possibilities, where you can take a look behind all the potential doors to see what lies beyond and how relevant this is to your business.

As AI technology continues to evolve at a rapid pace, it is fuelling the emergence of many innovative tools for the sales sector. New providers are entering the market every day, primarily in English-speaking countries, but increasingly in German-speaking countries as well. In addition to the pioneers in this field, many other providers now recognize the great business potential of AI solutions and are trying to profit from them. Thus, the landscape of sales-relevant AI tools is literally getting bigger by the day, which means that we are now dealing with a confusing

amount of different providers and tools that is extremely difficult to keep track of. Many of these applications work similarly, some have exactly the same functionalities and differ only in branding and name. Many of them are island solutions, while some already offer more complex platforms that cover several parts of the sales process.

In order to create clarity and overview in this veritable chaos of possibilities, applications, functionalities and tools, the tools available on the market today are summarized in supercategories based on their functionality (see Fig. 4.1).

There is some overlap between the individual categories: Vendors may cover multiple functionalities within each application area, and some functionalities have similar characteristics. Apart from that, different names are used for the same functionalities, as well as new names are invented, and this adds even more confusion and complexity to the topic. There is a lot of choice and the difficulty lies in finding the right applications that add relevant value to one’s organization, regardless of what they are called.

In order to bring order into this diversity, the specific tools are briefly described on the next pages – with a definition, their objective and the possible areas of application – and supported with some examples. In doing so, we will not go into too much detail, as the intention is primarily to create an understanding and overview of the application areas and functions of AI in sales.

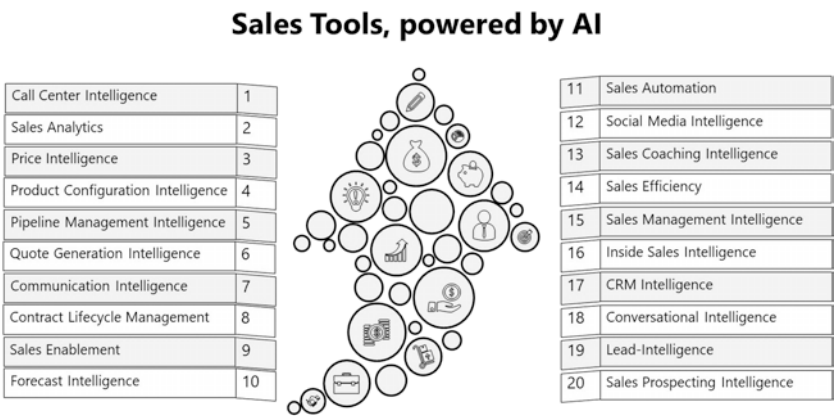


Fig. 4.1 AI tools for sales

It is also worth mentioning here that some of these tools cost little money or offer freemium models or free trial periods. This allows you to try them out and evaluate how relevant they are for your sales without having to invest money upfront. Some tools are also relatively inexpensive to use, contradicting the assumption that you have to shell out a lot of money to implement AI within your sales organization. In some cases, even the free entry-level option will be sufficient.

4.1 Call Center Intelligence

► **Definition** **Call center intelligence tools** are applications that are used in call centers to optimize and automate processes and activities there. In doing so, they promote higher customer satisfaction and loyalty.

Goal: Optimization and Automation of Call Center Activities

Typically, call centers have many manual and inefficient processes that can be very time-consuming and costly for the business. AI empowers companies to greatly improve the quality and performance in their call centers by reducing or even eliminating many of the typical problems there.

Areas of Application

Customer Satisfaction Analyses AI allows customer satisfaction analyses to be performed in real time during the customer call. Using transcription services and sentiment analysis, it quantifies important factors of customer satisfaction, such as callers' attitudes, opinions and emotions. On the one hand, customers are not "bothered" by being prompted for a post-call survey, and on the other hand, executives can intervene during the interaction instead of waiting for survey results, which are often inaccurate. This makes it possible to achieve better immediate results in individual cases and increase overall customer satisfaction.

Caller Identification Sometimes a unique identification of the caller is necessary, e.g. when granting a loan. Here, AI can identify the caller by voice (voice recognition) or face (face recognition) and save customers and employees the tedious process of authentication.

Personalized Address AI can immediately identify the caller and provide the call center agent with real-time recommendations for a personalized and individual approach to the customer. The agent gets live insight into the customer's interactions with various communication channels of the company (website, email, chat) as well as his social media activities.

Next Best Action AI-powered solutions provide real-time conversation analysis to help employees serve customers faster and better. The system records the conversations live and evaluates both the content and the tone of the conversation. Based on these analyses, the system makes real-time recommendations on how to deal with the customer and what the best next step would be.

Submission of Documents Customers can be enabled to send photos of documents directly from their smartphone. In addition to reducing internal paperwork, the data is immediately digitized, checked, the necessary information extracted from it and filed in the right place.

Sentiment Detection This analyzes the emotional state of callers with the purpose of optimizing the call experience. Emotion analysis can be used to route the customer to the right employee. For example, AI can route an angry customer directly to the claims department, which is well trained to handle customer complaints, whereas a happy customer is connected to the sales team, which can offer them a new product or upgrade.

Provide Information in Real Time When a customer asks a call center agent a question, the agent often has to look through multiple process documents and manuals to figure out the right answer. This is where AI can provide the agent with the right answers and information in real-time, improving the customer experience.

Predicting Customer Intent AI can predict customer intent by analyzing a myriad of customer signals – such as search behavior, clicks, interaction with ads and content, past inquiries and purchases – to infer and predict their future behavior. In this way, a high degree of personalization is possible without the customers having to explicitly express their wants and needs.

Quality Management AI makes the difficult task of managing quality in call centres easier. Intelligent systems make comparisons among employees, determine training needs, identify knowledge and skills gaps as well as needed improvements in the personal attitude of individual employees. They also help managers quickly diagnose and address problems, for example, by creating heat maps that show where action is currently needed.

Call Monitoring Call monitoring for quality assurance purposes can be time-consuming, as the reviewer must first record the call, then listen to it, evaluate it, and then provide feedback and coaching to the employee in question. AI can take over a part or all of this process and also allow the manager to intervene immediately when needed.

Automation of Simple Queries AI algorithms can completely automate and take over simple customer queries, such as queries on order status and account balance, retrieving specifications, performing standard bookings and orders, making changes in master and contact data, communicating order status changes, etc.

Routing of the Requests Intelligent call routing systems identify the caller and the reason for the call to assign it to the right employee. Not only that, AI algorithms go beyond the simple deterministic task. For example, the best qualified agent for that particular case may be busy and depending on how long the customer has been waiting and the skill level of the next best agent, the system decides whether to keep the caller waiting or assign the call to the next best agent. Intelligent

routing is also used for email and chat requests and can completely take over the manual distribution of tasks among call center agents. This frees up resources and reduces costs.

Personality Profiles AI algorithms can analyze the caller based on their language choice and make live recommendations to the employee on how to interact as well as on their wording based on the customer personality profile created.

Customer Argumentation AI algorithms analyze the arguments used by the customer and make real-time recommendations to the employee on how to deal with them, finding the appropriate explanations and reasoning for them, as well as giving instant access to relevant documents and information.

Voice Assistance AI technology can understand customers in different languages and dialects and also reply to the customers in the language of their choice.

Call Center Performance AI can optimize call center performance monitoring and management by automatically providing a range of valuable analyses at different levels: Customer satisfaction and retention, total and per employee revenue, cost per call, productivity, call handling efficiency, actual vs. budgeted costs, employee performance, response time, call duration, call abandonment rate, service level, customer satisfaction, call quality, communication etiquette, error rate, accuracy, script compliance, etc.

Tool Example

Cogito is a tool that performs speech analysis during the call – speech patterns, word choice, and other conversational dynamics – to determine the caller’s emotional state and provide real-time assistance to the agent. For example, it can instruct the agent to slow down the speech, empathize more with the caller, or give the caller time to speak. The system monitors calls live and allows timely intervention by the supervisor.

Practical Example**Increased Customer Satisfaction and Employee Performance in the Call Center of an Insurance Company**

An insurance company introduced the Net Promoter Score to increase customer satisfaction. It found that despite the fact that employees followed defined processes closely and used the right information, customer feedback consistently indicated a lack of empathy and trust. This was reflected in low customer satisfaction (NPS score).

The bottom line was that the company realized it didn't have effective tools to measure and influence customer satisfaction and improve employee performance. So it was decided to implement an AI-driven software to help the 500 employees do their jobs.

The software provided agents with visual cues to improve their speaking style. This allowed them to adjust their communication style in real time and build a stronger emotional connection with the customer. Employees listened better and expressed themselves more confidently and accurately. These behavioral changes led to shorter turnaround times (15% reduction), fewer complaints, and a reduction in escalations to supervisors.

The improvement in employee performance led to a 23% increase in customer satisfaction and a corresponding 2% improvement in customer loyalty.

Management now receives immediate customer feedback on all processed transactions, where previously they had to wait three weeks for reports. Customer feedback used to be not only delayed, but also limited and biased. Now, management has access to robust customer insights, enabling them to make faster and more informed decisions.

In addition, employee fluctuation decreased by 10% due to more objective feedback from supervisors and improved relationships with customers.

4.2 Sales Analytics

► **Definition** **Sales analytics** is used to determine results and identify, understand, and predict trends and developments in sales data with the goal of improving sales performance.

Goal: Improvement of Sales Performance

You can't effectively manage sales without constantly monitoring sales performance. To identify areas for improvement and implement strategies to increase efficiency, you need to know where you stand. After all, without accurate and continuous monitoring of results, it can take months before you even realize you have a problem with stagnant or declining sales. Many software programs allow you to break down overall performance across different areas, business units, and products to identify top performers and problem areas. AI-driven systems go a step further by not only collecting results, but also predicting future developments and making specific recommendations for action.

Advanced sales analytics systems make use of the four types of analytics (descriptive, diagnostic, predictive and prescriptive), using existing data from internal systems such as ERP and CRM and combining it with data from external sources.

With AI, companies can gain real-time insights not only into business results, but also into customer behavior, enabling the timely identification of developments and market trends. This allows them to make more informed sales management decisions and gain an advantage over the competition.

Areas of Application

Advanced Sales Analytics Identifies trends and complex patterns in the data and makes correlations in the data visible. Advanced Sales Analytics not only shows where your current success or downturn comes from, but allows you to better predict developments because they take into account the complex dynamics of the market.

Churn Analyses AI algorithms identify customers who are at increased risk of churn. They detect the switch to a competitor or simply the inactivity of the customer. Based on the detected characteristics of these at-risk customers, they

recommend appropriate measures to the sales representative to retain or win back the customers.

Performance Analyses With AI, deep analytics and predictions are possible at all levels: customer performance, product performance, sales cycles, close rates, opportunity performance, conversion rate, etc. Basically, AI algorithms can map quite a few sales performance metrics and also predict their development.

Business Intelligence (BI) AI is increasingly being used in BI systems and is taking BI tools to the next stage of development. It combines descriptive, predictive and prescriptive analytics and thus goes beyond classic dashboards and history-based analyses. AI algorithms independently discover interesting constellations in data and make recommendations for the next logical steps for data analysis. They enable not only reactive but also proactive analyses, with real-time insights.

Employee Performance Similar to performance analytics, employee-based analytics are available to monitor and manage their individual performance: Close rate, sales cycle length, profitability, goal achievement, etc.

Campaign Analyses With AI, sales and marketing campaigns can be analyzed and adjusted not only for past activities, but in real time. This way, promotions and advertisements are adjusted in real time and higher ROI of the marketing campaigns is achieved.

Cross-Selling Analyses Predictive analytics can not only identify cross-selling opportunities, but even predict them with high probability. Based on these predictions, sales reps can create targeted offers for specific customers and products that have a higher chance of being accepted.

Customer Behaviour AI can not only identify but also predict customer purchase intentions based on various signals that customers send when making decisions in the digital space. Insights from the cumulative behavior of customers enable faster adaptation and alignment of the company's strategy to current customer needs.

Tool Examples

Power BI from Microsoft is a BI tool that integrates NLP (Natural Language Processing), machine learning and advanced analytics on its platform since the end of 2019. This enables visualizations of data across multiple dimensions, as well as various scenario simulations. You can even ask questions in natural language and the tool answers with appropriate visual models.

Einstein Analytics is a Salesforce CRM functionality that visualizes activities in CRM and provides understandable insights into complex data: what happened, why it happened, what will happen, and what to do about it. It creates complete visualizations, predictions, insights, and more by consolidating all your data - including data from external systems - on a single platform.

Qymatix is a German provider of sales analytics software that offers powerful forecasting functions and modules for sales planning and controlling, thus complementing existing CRM and ERP systems. Among other things, the software identifies cross-selling opportunities, price increase potential and churn risks based on sales data.

Practical Example

Customer Churn in the B2B Services Sector

A B2B service provider was experiencing increasing customer churn, from a slow but significant decline in purchase volume to a complete severance of the business relationship. The business model allowed customers to switch providers quickly, and analysis indicated that the company was at risk of a seven-figure loss due to customer churn.

To prevent this, AI-powered customer churn prediction software was deployed. The existing CRM system was extended with machine learning models and information about customers and marketing activities. Customer service and pricing was integrated too. Thus, the system was able to generate churn predictions: on the one hand, the probability of churn and on the other hand, the expected reduction in purchase volume. Seasonal changes in purchasing behavior were also taken into account.

The software was able to accurately predict cancellations and changes in purchasing behavior six months in advance. Based on these forecasts, the company was able to develop and implement targeted customer retention measures and strategies for each customer, resulting in a doubling of customer retention rates as well as an increase in customer satisfaction through more proactive and targeted customer care.

4.3 Price Intelligence

► **Definition** **Price intelligence tools** are pricing models that allow prices to be adjusted and optimized based on current market demand. They mostly use machine learning algorithms that automatically generate dynamic prices in real-time based on various internal and external factors.

Goal: Increase Profitability by Optimizing Pricing and its Presentation

With price intelligence tools, buying trends can be tracked online and competitive pricing strategies can be developed. In contrast to static price calculation, dynamic prices are possible with such models, which are calculated not only on the basis of internal factors such as costs and margin requirements, but also on the basis of external factors such as supply and demand, competitor prices, availability, buying behavior, seasonality, day of the week, weather, etc. This makes it possible to calculate prices that customers are willing to pay because the product is worth the price in that specific moment. Consequently, the profitability of the company is positively influenced.

Areas of Application

Dynamic Pricing Software that uses machine learning to optimize prices dynamically and in real time. Based on customer behavior, relevant data is collected to generate most adequate pricing. For example, which items and how long the cus-

tomers looked at them, which products were added to the shopping basket, the customer's location, the device and operating system used. Such systems determine prices based on supply and demand at the exact time of the query. For example, hotels or airlines can maximize their profits by offering, among other things, the price that customers are willing to pay based on their demographic characteristics and the time of year.

Competition Pricing AI algorithms monitor competitor prices and allow users to take them into account when setting their own prices. Such systems can monitor real-time prices, promotions, and inventory levels of competitors in different countries and currencies. They can directly monitor a specific online store as well as price comparison portals such as Idealo or even individual merchants on a marketplace such as Amazon or eBay. Users of such systems find out if they are competitive and who is cheaper or more expensive. Not only prices, but also shipping costs and delivery times of competitors can be monitored. With such systems, you can develop a global pricing strategy to maximize your sales and profits.

Product Monitoring This allows you to monitor not only competitors' prices, but also a lot of information about a specific product. For example, you can monitor your competitors' stocks and find out if certain products are missing in your portfolio. Furthermore, you can read out information about individual products such as description, pictures, specifications, barcode (EAN/UPC), SKU, etc. and transfer these into your systems. This way you can ensure that the information in your shop is complete and up-to-date.

Electronic Shelf Labels These models go one step further, combining dynamic pricing models with advertising and bringing them to the retail environment. They access an unlimited number of relevant data sources to derive the most effective price and advertising message and present it to the customer in real time and dynamically at the POS (point-of-sale): on the shelf, in the aisle, when the customer is directly in front of the product.

Tool Examples

Incompetitor is a solution from Intelligence Node that gives the user access to competitors' catalogues and prices. This makes it possible to use competitor prices as a benchmark for one's own pricing structure. The vendor claims that its AI can monitor more than 1 billion individual products from more than 130,000 brands in over 1100 categories.

Perfect Price is an AI solution for dynamic pricing that claims to enable businesses such as car rental companies to price dynamically.

Minderest is a price monitoring and price optimization software for retailers and distributors. The software offers a wide range of functionalities and is used by brands such as L'oreal, Douglas, Shiseido, Sony and RayBan, according to the company.

Shelf Edge Solution by **Singular Intelligence** provides retailers with accurate, automated and real-time predictions and recommendations, enabling optimal shelf replenishment plans, product arrangement, pricing and promotion decisions. Its powerful AI engine integrates and harmonizes all causal factors (point of sale, consumer preferences, brand perception, competition, weather, pricing, promotions, events, etc.), and its dynamic AI analysis delivers accurate alerts, predictions and scenarios to maximize sales, revenue and consumer experience.

Practical Example**Market Entry of a Sporting Goods Retailer Secured Through Dynamic Pricing**

To ensure the success of its market entry strategy in a new country, a sporting goods retailer turned to Dynamic Pricing. The goal was to automate pricing and optimize online marketing to position itself as the best price-performance provider in the new market. The software monitored prices daily and automatically adjusted them according to strategy criteria.

With this model, the company was able to achieve the desired market position within a very short time and even double the planned growth. One of the positive side effects was an 80% increase in the conversion rate for dynamically priced products.

4.4 Product Configuration Intelligence

► **Definition Product Configuration Intelligence Tools** are product configuration systems that, with the use of AI techniques, facilitate and accelerate the search for a valid product configuration and thereby enable the creation of a solution that is optimally aligned with the needs of the specific customer.

Goal: Acceleration, Optimization and Facilitation of the Configuration of Complex Customer Solutions

Configuration systems help with the challenge of assembling complex products and services, such as financial services, industrial applications or vehicles, according to given requirements. They ensure the accuracy of the offer and prevent products from being offered that are not feasible in production. Therefore, configuration systems are very often not only a tool for quickly putting together customer-oriented solutions, but also a mechanism for checking the formal correctness of the configurations offered.

Areas of Application

Customizing Solutions AI-based systems can personalize product solutions in numerous ways beyond basic customization. Traditional product configuration tends to have certain similarities, whether at the product, salesperson, or technician level, based on the preferences and knowledge level of the individual. With AI, it becomes possible to configure truly customer-centric and -oriented solutions that offer the optimal and unbiased configuration for the respective customer.

Feasibility AI algorithms check to what extent the configuration offered can also be implemented. This is particularly important in the sale of complex solutions, because it can prevent configurations from being offered that are not feasible. This avoids complaints, contract penalties and down payments.

Visualization of the Configuration for Customers In addition to AI, another technology comes into play here (3-D visualization and virtual reality), which in combination enable the visualization and virtual configuration of a solution. In this way, they ensure that the finished product meets the customer's needs exactly, while also guaranteeing that the solution is feasible and also within budget. Such solutions allow the customer to visualize the product in his context and check whether, for example, the final product dimensions are suitable for the available space. This speeds up the sales process and improves the customer experience. Going one step further, such systems allow customers to configure the solution themselves, saving valuable sales resources.

Configuration Recommendations for the Sales Department AI-powered product and quote configurators guide the sales rep through the process, automatically checking and validating all possible combinations for each choice made. In the event of a discrepancy or possible configuration conflict, the employee is immediately notified, while being presented with the best possible alternative. This means that, on the one hand, no mistakes are made, while the optimal solution is always found, and, on the other hand, a lot of effort and time spent on checking offers by other departments (product management, engineering, finance, etc.) is avoided.

Solution Orientation and Added Value In order to intelligently support customers during their search for products, contextual knowledge is required, for example about their current business situation and needs. This is where so-called Digital Knowledge Advisors come into play, bringing in valuable insights from the customer's past transactions. For example, they would recognize that the customer has always bought the product with a certain performance class in the past and narrow down the current search for suitable products or directly suggest the most recently ordered variants. With even more information, such as live data on the products

used, the customer could even be alerted to the fact that they have purchased oversized configurations in the past and that a smaller power class would suffice for their actual application. Such knowledge would be an enormously important lever for sales to find the right solutions for customers.

Tool Example

Tacton offers an AI-based configurator that enables product configuration visualizations. The system selects the right configuration from a myriad of options and enables sales staff to convert customer requirements into a customer-specific optimal configuration, including quotation, in a matter of seconds. The MAN Truck & Bus cockpit configurator is based on this solution. Siemens uses the Tacton Configurator for the configuration of gas turbines: what previously took them eight weeks can now be done in a matter of minutes.

Practical Example

Product Recommendation Based on Real Photos in the Consumer Area

A clothing retailer was looking for a way to help its customers find suitable clothing products based on their own personal photos. AI-powered image recognition was used for this purpose.

The software compared the characteristics of the photographed garments and searched for similar clothes in the company's own online shop as well as on other e-commerce platforms or in social media. The method developed was able to aggregate over 1,000,000 different clothing products available on a number of major e-commerce platforms into a significant number of categories. It used this to find matching items in its own portfolio.

The final solution allowed users to upload photos of clothes taken in local conditions, and the software would find the best possible option available online.

4.5 Pipeline Management Intelligence

► **Definition** Pipeline management intelligence tools use automation and AI to plan, manage, and track sales opportunities.

Goal: Optimization of Complex and Long Sales Processes

AI-based pipeline management tools enable sales organizations to continuously achieve their goals by helping reps focus on the business opportunities with the greatest closing potential. They direct employee focus to the right opportunity at the right time, saving sales from having to constantly qualify and prioritize opportunities. This frees up resources for actual selling. They also provide valuable insights into customer activity, thus increasing sales productivity, shortening sales cycles, improving forecast accuracy, and driving revenue.

Areas of Application

Closing Probability AI-powered pipeline management tools help employees understand which opportunities in their pipeline are “real” and which have the highest probability of closing during that sales period. They calculate the likelihood of opportunities closing and focus employees’ attention on the deals that currently have the most urgent call to action. This ensures that employees engage with the right customers at the right time, what leads to shortening of sales cycles and improvement of closing rates.

Next Steps Planning AI algorithms read billions of signals your customers send out and anticipate what they’ll need next. They also recommend the best next step for each opportunity to sales reps.

Insights into Customer Interactions Based on detailed analytics of customer interactions, AI provides relevant insights into the opportunity at hand, enabling sales to better understand the customer’s entire buyer journey and make the right decisions to drive the opportunity forward.

Recommendations for Action Prescriptive analytics send timely signals and facilitate understanding of where deals are stuck in the pipeline, which ones are progressing, and what actions are needed to stimulate their progress.

Opportunity Coaching AI algorithms provide sales leaders with insights and observations related to how salespeople are handling their opportunities: how disciplined they are in pursuing them, and whether they are taking the right steps to close that opportunity. This way, managers can help their employees close their deals by guiding and coaching them through the process. AI will aggregate metrics per employee across multiple sales periods and draw up comparisons with other employees and sales teams over time. The system will point out significant interactions, trends and patterns. For example, it will alert on risk opportunities or a missed next step in the process.

Sales Process Standardization The structure and visual representation of the pipeline – with its individual phases specifically tailored to the sales process of the respective organization – promotes adherence to the sales process, consistent evaluation of opportunities, and also the enhancement of best practice approaches.

Tool Example

Clari provides AI-based pipeline management functionality in its software, enabling companies to pursue the right opportunities as well as identify pipeline risks. The tool makes deal, pipeline, and forecast predictions based on activity signals and historical behavior patterns, and provides insights specifically tailored to the characteristics of the company. The software is used by companies such as Zoom, Dropbox, Symantic and Lenovo.

Practical Example**More Efficient Targeting and Pipeline Management in a Traditional Company**

Founded in the 1980s, a family-owned company offering eco-friendly skin care products faced the challenge of better targeting potential customers and converting prospects into customers. As with other traditional businesses, the company generated its leads primarily from attending trade shows and events and conducting small-scale marketing activities. The sales process was not very efficient: when a prospect filled out an inquiry form, they were sent an email or called once – and that was it. The prospect would never hear from the company again unless they took the initiative themselves. There was no structured pipeline management process and customers were lost to competitors.

The company realized that a better solution was needed to identify and manage prospects. With the newly implemented system, once a lead is created in the CRM, an automated email is sent to the prospect introducing them the company. In parallel, a workflow was set up by using the lead details and the prospect's zip code to assign the opportunity to the appropriate sales representative. This ensures that no lead is lost.

In addition, different pipelines were created depending on the type of customer, for example for consumers and for business customers. Within these pipelines, matching phases to the customer's buying process were introduced. For example, when a customer shows interest in certain products, until they are sent a sample, they are in business phase A, where an action is required on the business side. Once the prospect receives the samples, the opportunity is moved to business phase B, where an action is required on the customer's part. The team knows exactly which phases the opportunities are in and can target them. Salespeople are now more accountable for their actions: they focus on the right customers. And where action is required, they ensure that it is completed immediately.

In addition, the effectiveness of marketing campaigns could be increased. Previously, thousands of emails were sent without knowing who exactly they were aimed at. With the new tool, sales campaigns can be planned that were 100% oriented to the needs of the prospects or customers. This has significantly improved targeting and generated more opportunities.

4.6 Quote Generation Intelligence

► **Definition** **Quote Generation Intelligence tools** are AI-driven Configure Price Quote (CPQ) systems that help salespeople create accurate and customized quotes, simplifying and accelerating the quoting process, especially for complex products and services.

Goal: Optimization of Price Calculations, Improvement of Margins, Increase of Closing Rates and Shortening of Sales Processes

Manual quote configuration often leads to errors, which in turn results in lost revenue and decreased customer confidence. CPQ applications support complex quote generation processes by ensuring quotes are accurate and meet customer requirements. Typically, these are rule-based systems designed by business analysts, which have become increasingly automated in recent years. With AI, these systems are taking the next big step, not only by simplifying and accelerating the quoting process, but also by optimizing pricing, identifying up-selling and cross-selling opportunities, making configuration recommendations, and automating internal approval processes.

An AI-driven CPQ system improves sales performance, brings agility and efficiency to rigid and tedious processes, and provides your customers with exactly what they need as quickly as possible.

Areas of Application

Price Optimization An AI-based CPQ system processes all relevant customer data and history from disparate systems, including attributes such as location, size, revenue, and number of customers, to optimize pricing. The system also considers similar projects with other customers to calculate a quote that is most likely to win. This makes it possible to calculate prices based on value instead of the usual cost- and margin-based models.

Quote Optimization Similarly, the entire offer package is optimized and not just the price itself. The system can identify which additional components might be relevant, identifies up-selling and cross-selling opportunities, recommends product

combinations and determines the optimal contractual terms. This allows salespeople to discover new potential and offer their customers products and services they wouldn't have thought of, adding value rather than simply capturing customer requirements in a quote. When salespeople make the right offer from the start, this increases the likelihood of closing the deal, shortens the sales process, and increases customer acceptance and confidence.

Pricing Visualization Modern AI-driven CPQ systems can visualize price improvement potentials, workflows, bid limits and margins. With flexible 2-D and 3-D views in the quotation workflow, potentials and need for improvement become easier to identify.

Price Ecosystem With an AI CPQ, entire pricing ecosystems can be developed over time, making it possible to optimize prices and margins across the entire organization, not just at the individual transaction level. The system learns with each new task and maximizes sales profitability in the long run.

Approval Process AI-powered CPQ systems can greatly reduce the effort and duration of approval processes. For example, the system can calculate the probability of approval for the sales employee and even make suggestions as to which improvements can increase the chances of approval. This means that the sales employee can act accordingly right from the start and does not need to make requests that will be rejected anyway.

Tool Example

Apttus CPQ is an AI-based CPQ system that acts like a “virtual advisor” to the sales rep in the quoting process. The system quickly and accurately guides the rep through complex quoting processes, ultimately closing larger deals with a higher win rate. Companies like HP, Adobe, Seagate, and Paypal rely on Apttus.

Practical Example**Precise, Needs-Based and Fast On-Site Quotations in Complex B2B Business**

The quoting process at a manufacturer of high-precision assembly equipment was error-prone. The high manual processing overhead, combined with a complex price catalog, multiple product combination options, and frequent price changes, resulted in a slow and frustrating quoting process.

The newly implemented system allowed field staff to create accurate and customized estimates right on the spot. Employees were guided through the complex quoting process, with certain steps in the process automated entirely. This enabled the easier handling of the high product and pricing complexity and shortened not only the quoting process, but the entire sales process. Closing rates increased due to the quality, customization, and speed of the quotes. Consequently sales increased, in combination with higher customer and employee satisfaction.

4.7 Communication Intelligence

► **Definition Communication Intelligence** is based on NLP (natural language processing) and NLU (natural language understanding), which use natural language processing techniques and methods – written texts or speech – to derive analytical insights from communication content. This enables computers to understand, interpret and communicate in human language.

Goal: Optimization and Automation of Customer Communication

Customers are increasingly using text-based communication channels, especially messaging apps, and this is where AI can not only communicate with customers over these channels on its own, but also greatly increase the quality of communication. With the power of NLP and NLU, better communication, customer experience, and personalization are possible than ever before. This is because AI can not only capture text messages, file them and understand their content, but also identify

the intent and the emotion associated with it. Thus, AI can derive relevant insights from this and use them to optimize customer communication: whether in the content, on the emotional level or in the choice of language.

Areas of Application

Emotion Recognition NLP-based text analytics can provide relevant insights into customers' intent by analyzing different information from different sources: Online customer reviews, feedback forms, review sites, forums and social media discussions, articles, posts and blogs. They evaluate the customers' opinions, understand their emotions and deduce their perception about your company or on a particular topic. Consequently, you can identify the level of customer satisfaction and make targeted improvements.

Communication Optimization NLP analyzes the way the customer communicates, recognizes their language choices, preferences, and emotions, communicates with them in "their" language, and specifically addresses their current emotional state, including their level of satisfaction. AI can use this capability in its direct communication with customers or make targeted recommendations to employees on how to interact with the customer, even to the point of pre-recording individualized responses.

Brand Voice AI can develop a own distinctive brand voice for your business. Should you be on a first-name basis with your customers? Address them in high-level language? Formal or more informal? AI will design the optimal language style for your brand, endow it with a personality and consequently adapt the corporate message as well as its tone – whether in written communication or via voice assistants.

Translations With NLP, automatic translation of messages or content into the customer's native language is possible, improving the customer experience.

Interactive Voice Recognition Voice recognition can, for example, allow customers easy access to their accounts or route them to the right contact person when they call. The customer no longer has to type into their mobile phone, but can say it, for example “technology”, and be routed directly to the technical department. The system can even recognize the content of the request (e.g. “How do I set up an Internet connection on the TV?”) and route the caller directly to the right employee or provide the relevant information.

Tool Example

Quill by Narrative Science is a natural language generator that analyzes online and digital data to identify facts, phrases, and language choices that matter to your sales organization. It produces content for sales that matches your business rules and style preferences: Tone, Style, Formatting and Expression. As a result, Quill increases the value of the sales data companies already have and creates appropriate sales scripts, reports, and other documentation to enhance sales.

Practical Example

Powerful Marketing Campaigns Through Automatic Subject Line Optimization

With the battle for customer attention getting tougher with every email campaign sent, a platform provider was looking for a solution to stop the drop in open rates for their marketing campaigns. AI brought a practical solution here to optimize email communications. Algorithms learned what worked and what didn't, and continuously optimized the messages sent out.

By optimizing the subject lines of marketing campaigns, the software achieved a 44% increase in open rates. This increased the overall performance of email campaigns: more opens led to more clicks and consequently to higher conversions.

4.8 Contract Lifecycle Management

► **Definition Contract Lifecycle Management (CLM)** tools are applications that map the entire contracting process, from contract initiation to contract award, compliance and renewal, including contract management.

Goal: Minimization of Effort and Risk in the Process of Contract Negotiations

Contract negotiations are the order of the day especially in complex sales and can be nerve-racking and time-consuming. In addition to the negotiations themselves, the lengthy coordination between different departments internally and on the customer's side is a time-consuming and resource-intensive process. Apart from that, sales people are usually not lawyers and not well versed with contract clauses. And this is where AI can support well by simplifying and speeding up the contract management process in companies and thus drastically reduce the associated risks while ensuring compliance.

Areas of Application

Contract Risk Reduction Poorly drafted, incomplete, or even missing clauses in business contracts can have disastrous consequences for a company and pose both financial and reputational risks. AI algorithms can recommend clauses here based on historical and other relevant data, and even declare some of them mandatory. This greatly reduces risks that can result from incorrect or missing clauses.

Contract Review AI makes contract review a breeze because AI algorithms can do it faster and also better than humans. In an experiment by LawGeex (2018), 20 US lawyers with extensive experience in corporate law competed against the in-house AI to review five non-disclosure agreements. The results were astounding. The lawyers achieved an 85% accuracy rate. However, they were outperformed by the AI, which could boast an average rate of 95%. On average, the lawyers took about an hour and a half to review – and AI finished it in just 26 seconds.

Closing Probability Predictive analytics calculate the probability of closing or rejecting the contract. This allows sales to focus on the contracts with the higher probability of closing, thereby closing more business in less time. Efficiency increases.

Shortening the Duration of the Contract Prescriptive analytics can help identify the right course of action to avoid delays in the contract management process, as well as minimize the risk of renegotiation or contract loss. The algorithms make concrete recommendations on what would be appropriate in this particular case, even with real-time contract tracking. This allows contracts to be executed and managed much more effectively and efficiently.

Data Collection AI-based contract management tools can take over the laborious manual data entry in contract management. For example, algorithms can extract content from scanned documents, evaluate it, and automatically enter it into the system. In addition, AI can take over many other administrative tasks that sales must do manually as part of contract negotiation and management: Contract filing, sending, approval, and signing.

Tool Example

Exari, now acquired by Coupa, has developed an innovative AI-powered contract management platform capable of creating, storing, analyzing and managing complex contracts. Thanks to the depth and flexibility of the platform, these benefits are available to the most diverse industries.

Practical Example

Management of Back-to-Back Contracts at a Technology Provider

A technology service provider faced the challenge of managing contracts within a decentralized organizational structure. The main problem: There were inconsistencies between customer contracts on the “selling side” and the associated supplier agreements on the “buying side” – so-called back-to-back contracts. The company was looking for a solution to ensure that the terms and obligations from the customer contracts were seamlessly passed on to the partners.

For this purpose, an AI-based contract management platform was deployed, which enabled deeper insights into all contractual agreements by analyzing contract content and terms. With centralized access to all contracts, seamless communication between sales and the legal department was now possible, significantly speeding up the contracting process. Creating, viewing, approving, and managing contracts plus creating notifications, moving contracts forward, making requests, and communicating along the approval process: it was all done within the platform.

Not only was the company able to ensure that the terms and obligations of customer contracts were seamlessly passed on to partners, but it was also able to ensure that compliance requirements were met. It was possible to track exactly what was signed, when and by whom, and deeper insights into all contractual agreements are now possible. By analyzing content and terms, they can identify previously unrecognized opportunities in contracts.

In addition, virtual assistants and self-service tools allow sales reps to access contracts from any device, and the approval process is automatic.

4.9 Sales Enablement

► **Definition** **Sales enablement tools** provide necessary sales resources and information across the sales organization, empowering salespeople to be more effective in their sales activities.

Goal: Organization and Distribution of Sales Information and Resources

Sales resources and documents are often difficult to access, unorganized in various filing systems, sometimes on sharepoints, but in reality on the PC hard drives of the respective employees. Often the use of sales information is inconsistent and inefficient. Sales enablement tools keep these resources organized, accessible and effective. They provide your salespeople with not only documentation, but also the knowledge they need to better close deals. Basically, sales enablement is a process of equipping salespeople with the resources they need to be more effec-

tive in their sales activities. These resources can include content, tools, knowledge, and information to effectively sell your product or service to customers, as well as track your customers' and prospects' reactions and interactions with these resources and content.

Areas of Application

Sales Content This is not just about delivering, but also about sharing and tracking sales content. In contrast to the traditional sending of sales documents via email, where the sales department has no choice but to wait for a customer response, sales employees can use such tools to track the interaction of customers with their documents and gain interesting insights from this: When was the content viewed, for how long, and how often? Moreover, personalized portals can be designed for each customer, and the system alerts sales about the level and timing of the customer's engagement with the content on the portal.

Document Management AI algorithms can filter content based on actual customer interaction, allowing sales reps to know which documents (including which pages within them) resonate most with their customers.

Information Optimization AI can not only optimize the management and sharing of information with customers, but also increase the quality of that information. It can recommend appropriate content that is targeted and personalized based on customer behavior and predicted customer needs. This increases the likelihood of fulfilling customers' needs and closing deals faster.

Email Communication Email communication is one of the most time-consuming tasks in sales and AI can relieve employees here, for example by preformulating responses, but also by optimizing the quality of communication. AI algorithms can analyze customer interactions and create highly personalized emails based on this information. For example, it can optimize the subject line and track their click

performance closely. It generates content in different formats and suggests the optimal version for that one customer. In doing so, it analyzes his reading behavior and can even recommend the optimal timing to send a message.

Tool Example

With **Zendesk**, sales reps can track every customer interaction with sales resources throughout the entire buying process. This makes it easy to keep track of which sales resources and tools they should use and which ones they might include in future interactions to close a deal.

Practical Example

Double Email Response Rates with Automated Email Templates

A platform provider faced the challenge of employees not knowing if their emails were reaching the intended recipient. This sales organization was based on 70% pro-active customer acquisition, and so the deliverability issue impacted the ability to create a quality pipeline. As a result, the majority of sales reps were unable to meet their goals.

Aside from email deliverability, managing sales templates was an issue. The company relies on an account-centric sales approach, so it's important to use target-customer specific templates. The inability to manage these templates resulted in employees having to manually copy and create custom templates, which took a lot of time and was also frustrating.

Finally the company decided to deploy an AI solution that allowed the team to share documents and email templates while personalizing communications with customers at scale. With these templates, the team was able to double its email response rate and quickly fill a quality pipeline.

By sharing templates, even new employees were able to write optimal messages without a long training period. They could be productive and contribute to the success of the organization literally from day one.

Within two months of implementation, the downward trend in employee goal achievement was stopped. Employees were now able to not only achieve their goals, but exceed them, with a steadily increasing trend.

4.10 Forecast Intelligence

► **Definition** **Forecast intelligence tools** are applications that improve the process of predicting future developments such as revenue, expenses and profits by enabling more accurate forecasts. This involves assessing company's own capabilities and the market and customer potentials, taking into account internal and external factors.

Goal: Provide a Better Basis for Decision-Making

Accurate forecasting is one of the most critical factors for a company's business success, but it is a remarkably difficult challenge for sales executives to overcome. In most cases, forecasts are based on historical data and the intuition of individuals, which often leads to inaccurate forecasts and, as a result, over- or under-production, improper sourcing, bad investments, poor budgeting and resource planning, and missed business opportunities. As a result, companies rely on statistical models that are able to take into account, for example, the company's revenue data for the last ten years to produce a forecast for the coming year, but in today's volatile business environment, this is no longer sufficient because the required accuracy is no longer available. Traditional forecasting methods are simply unable to handle the number of metrics and KPIs available, which often number in the thousands. And so this is where machine learning models come into play, monitoring and analyzing changes in big data. And they do so in fractions of a second, taking into account thousands of seemingly disparate metrics.

Areas of Application

Business Forecasts AI-based forecasting tools can take into account as many factors as are available and produce much more accurate forecasts by identifying patterns and correlations that would otherwise have gone unnoticed. And it goes even

further: predictive modeling combines data mining, probability and machine learning to provide even more specific and detailed results and future scenarios. The model takes into account a variety of inputs and predicts future behavior, trends and scenarios – not just a simple number. And it goes far beyond traditional revenue and profitability forecasts. For example, they can predict which products will sell better soon or which customers are likely to buy in the next 30 days.

Demand Forecasts With AI, demand models can be built with a high degree of predictive accuracy. These intelligent models can access vast amounts of data and different data sources and find patterns in them that humans wouldn't recognize. Not only do they take into account the past, present and future, but they also consider external factors such as promotions, seasonality and even the weather. This allows for very accurate demand forecasting and consequently accurate demand planning, avoiding out-of-stock scenarios. This allows costs to be reduced within supply chains and significant improvements to financial and capacity planning. Not only do profit margins become higher, but cash flow planning also becomes easier.

Data Basis Unlike traditional planning, which is purely historical and based only on internal data, AI also evaluates external data, such as price changes and inventory levels among competitors, changes in consumer behavior, market trends, weather and seasonality, and even special events.

Dynamic Forecasts Compared to classic rigid forecast models, AI enables dynamic, real-time forecasts that become more accurate and better with each new piece of information, enabling daily as well as intraday forecasts. Such solutions act completely autonomously and continuously reconfigure forecasts – as patterns change – allowing you to make timely and informed adjustments to your decisions and actions. This is particularly important in the perishable food industry, for example.

Tool Examples

Symphony RetailAI is an AI-powered demand planning and forecasting software for use in retail. The cloud platform can be up and running in days, optimizing product availability, reducing the risk of out-of-stocks, waste and spoilage, and providing a better understanding of sales trends and anomalies.

HyperCube's **Nitro** is a SaaS-based AI-driven demand planning solution for publishers. The software automatically calculates and adjusts the number of copies to be delivered.

Practical Example

Retail Demand Forecasts

A retailer faced the challenge of creating accurate, long-term forecasts. Long supply chains combined with short product lifecycles created a high level of complexity and dynamic when creating long-term demand forecasts. So the company decided to use an AI-powered forecasting system.

The solution developed was able to build a forecast pipeline for sales nine months in advance. In doing so, the software took into account seasonal changes in demand and was able to identify suitable replacement products, enabling greater planning accuracy across the entire product range.

4.11 Sales Automation

► **Definition** **Sales automation** implies the execution of activities and tasks by machines, with minimal or no human involvement. AI sales automation tools perform repetitive tasks on a daily basis without the intervention of a salesperson.

Goal: Automation and Standardization of Sales Processes and Activities, Reduction of Repetitive and Administrative Tasks

Salespeople spend a disproportionate amount of time on administrative tasks, whether due to their role in internal processes or on behalf of the customer. As a

result, automation systems are increasingly being used in sales, primarily for monitoring sales processes, collecting data, and creating automated reports. AI brings a new dimension to this as well: it will automatically and intelligently process information from various sources and initiate the resulting actions, relieving sales of many non-sales-related tasks.

A study conducted by the McKinsey Global Institute in collaboration with Salesforce found that AI automation technology can be applied to nearly 40% of a company's sales processes (Valdivieso de Uster 2018). With the projected advancements in technology, especially in natural language processing, this percentage could be over 50%, according to the study. This means that salespeople can be relieved of mundane, repetitive tasks such as processing orders, recording customer activities, reporting and transmitting market information.

Areas of Application

Distribution of Tasks AI algorithms can automatically assign tasks within the sales organization: Leads, orders, service requests, customer interactions. For example, after pre-qualifying the lead, a chatbot could decide on its own who from the sales team can best handle that customer and assign the task.

Automatic Data Gathering Data from various sources such as ERP, email system and calendar can be automatically captured and updated in the CRM without the need for any interaction on the part of the employees. AI transcribes customer conversations and creates records from them that are automatically stored in the CRM in the right place, records customer requests and informs them about the status of their orders.

Process Analysis AI can independently analyze and evaluate diverse processes in sales. The tools then generate reports based on given KPIs or create suggestions for process improvement.

Meeting Coordination AI autonomously coordinates meetings with multiple participants, whether internal or external, and books meeting rooms.

Customer Communication AI can independently communicate with customers until they reach a stage where they can be handed over to sales.

Research AI can take over the information research process entirely and automatically deliver new relevant information about customers and deals. It also independently researches potential customers and continuously delivers new interesting leads that sales can address immediately.

Tool Example

Freshworks Sales Force Automation is a software-as-a-service product aimed primarily at the SMB market. Its AI, affectionately known as “Freddy”, provides predictive insights, automates repetitive tasks and points out new business opportunities. Along the way, Freddy also ensures data accuracy, for example, it will automatically find and merge duplicate leads and contacts in the system.

Practical Example

Automated Contact and Activity Recording in B2B

A B2B company was experiencing a problem where customer contact data was not being consistently and accurately captured and was being incorrectly mapped to opportunities. The lack of data extended across the entire sales process: from pre-sales to after-sales. This made it impossible to calculate the effectiveness of marketing investments and analyze customer satisfaction and retention.

The company implemented an AI platform that was used by multiple departments: Sales, Customer Care, Order Processing, Business Development, Marketing and Customer Service.

In the first six months after implementation, over 100,000 contact details were automatically captured and the quality of the data in the CRM increased from 50% to 90%. This enabled the marketing department to better segment customers and develop more targeted campaigns.

Sales management performed win-loss analyses to determine how to deploy resources and who to involve when along the sales process in order to accelerate sales and improve win rates. Additionally, the system was able to identify early signals of potential customer churn.

4.12 Social Media Intelligence

► **Definition** **Social media intelligence tools** enable the automation and optimization of sales and marketing activities on social media, as well as monitoring the performance and perception of one's brand and competitors.

Goal: Automation and Optimization of Activities on Social Media

Social media activities can be very time and resource consuming, often keeping entire departments busy. As a result, many automation tools have now emerged to help manage these activities. However, AI-driven systems go even further: they are able to create, schedule, post and evaluate the performance of content and ads on their own. And it only takes them a few minutes to do so. They monitor your brand: its reach, mentions, and audience interaction, as well as customer sentiment. They discover fans, trolls and factors that influence the perception of your brand. Similarly, they allow you to monitor your competitors: what they're doing, what their customers are saying, and how their advertising is performing.

Areas of Application

Social Media Management AI tools can generate social media content completely automatically across channels and even insert hashtags by default. They also post large amounts of content and automatically schedule its distribution. At the same time, they not only automate the content creation and management process, but also optimize its success by constantly adapting the content to the audience's expectations, identifying the right timing, the right platform, and the right hashtags.

Social Insights and Social Listening There are a number of AI-powered tools that generate insights from social media profiles and follower activity. AI algorithms analyze social media posts on a large scale, understand what is being said in them, and provide valuable insights based on this information. This can be used to identify trends in customer behavior, find new audiences, keep an eye on your brand's reputation, track brand equity, discover viral events, and identify advertising opportunities.

Competition Monitoring AI algorithms monitor not only your target audience and their interaction with your brand, but also the competition: its activities, the performance of its advertising and the perception of the target audience. AI will detect the introduction of new competitor products and the announcement of an important change in time for you to react.

Social Media Advertising There are AI-based tools today that create Facebook and Instagram ads completely on their own. And it goes even further: AI will constantly optimize the ad, based on the clicks and the audience's interaction with it, to increase the conversion rate.

Customer Reviews Star ratings provide a wealth of information that AI uses to extract and analyze sentiments and opinions from product reviews. These insights are worth their weight in gold when developing products and sales strategies.

Tool Examples

Mentionlytics offers an AI-powered tool to monitor competition across all social media platforms.

Meltwater is a Norwegian provider of a media intelligence solution that enables global media monitoring, social media monitoring and engagement.

Auris is an AI-powered platform for social listening, functioning across channels and providing industry-specific insights.

Practical Example**Social Listening in the Consumer Sector**

Word of mouth is a key criterion for a provider of consumer goods for its corporate success. The company aims to engage many people in discussions around its brand, which requires intensive content marketing and close collaboration with influencers and brand ambassadors. To meet this challenge, the company decided to use a social media intelligence tool.

Using the new tool, the company now knows which messages resonate with customers and which ones inspire them. Through an integrated influencer ranking system, the marketing department is able to react quickly to important interactions. If the interaction scores at least 8 on a scale of 0–10, they are engaging. By looking at the conversation history, you can see if influencers have changed their mind about the brand, if they are consistent in their comments, and if the time frame between engagements is consistent. This can help you draw valuable conclusions about how to work with a specific influencer.

The tool makes it possible to know if and why social media activities are successful and enables a real ROI. It uses metrics such as reach and sentiment to understand and target audience engagement.

4.13 Sales Coaching Intelligence

► **Definition Sales Coaching Intelligence Tools** are sales coaching platforms that support the sales performance management process. The software enables the continuous monitoring and assessment of sales performance and promotes the training and coaching of individual sales employees and entire sales teams.

Goal: Support in the Process of Employee Management and Coaching

Training and coaching salespeople is a challenge, especially in larger organizations, because traditional training measures do not always address the specific and individual needs of each employee. This is where AI-driven coaching solutions come into play. They are centralized platforms that manage data on employee knowledge and skills, including background information on individuals and their

performance. They also draw on data sets that are “outside” the platform, such as performance data, sales transactions, and activity data (e.g. calls and emails from sales reps). These systems use Natural Language Processing, Conversational Intelligence, and Machine Learning to analyze all of this data and provide accurate results to support the coaching process and the employees’ development. They enable continuous employee training with live feedback and suggestions for improvement. In essence, these platforms are a natural complement to sales training and onboarding software that enroll new hires and provide continuous learning across the sales organization through role-playing, competency assessments, and micro-courses.

Areas of Application

Scenario Simulations Realistic scenario simulations with video-based role plays significantly reduce the amount of time managers spend on employee coaching. They simulate very realistic customer interactions and help salespeople develop the necessary sales skills and confidence. In particular, when it comes to overcoming the most difficult sales challenges, such as customer prospecting, objection handling and price negotiation, these systems can support your employees well. The content and structure of the simulations can be adapted to the specifics and needs of the individual employee.

Performance Appraisals and Feedback AI technology can not only transcribe texts or recordings, but also draw qualitative insights about employee performance from them. For example, from a recording of a customer call, the system evaluates how well the sales employee responds to the customer and his emotions, how high the degree of interactivity is, how good his choice of language is, and whether the content is adapted to the customer’s needs. This means that the managers no longer need to evaluate the conversations themselves, but simply draw relevant insights and provide their employees with selective feedback and improvement input. The system can also benchmark individuals against the entire team and specifically point out areas of development for that employee. In addition, AI-driven coaching

platforms can provide a feedback quality index and capture the relevant results in HR management systems to improve annual performance appraisals.

Education and Training Programs With AI technology, training programs can be designed in a much more need- and target-oriented way. Instead of organizing standard training, such systems can be used to develop individual programs: for individual employees and for entire teams. The strengths and weaknesses of each individual team member are taken into account via a range of competencies.

Guided Coaching AI-supported coaching platforms specifically guide sales managers through the coaching process: what do they need to observe, what do they need to pay attention to, what to look for, and what needs to be evaluated? This ensures that all managers proceed in a methodically consistent manner, while being very specific to the individual situations of individual employees. On the one hand, they have more information about the individual employee than ever before, and on the other hand, the prescriptive approach enhances the coaching qualities of the manager, thereby increasing the overall effectiveness of the coaching across the organization.

Tool Example

Chorus.ai automatically records, transcribes and analyzes all calls and video conferences in real time. Chorus can break down a one-hour conversation into a five-minute summary and provides actionable feedback on it. This results in AI-based insights that can be used to follow up with clients, coach employees, enroll new employees, and develop customized training programs. Companies such as Adobe, Zoom, Outreach, and Qualtrics use the Chorus platform.

Practical Example

Reduction of Employee Turnover Through Data-Driven Coaching

To ensure that new sales reps are well-prepared for customer interactions, a software provider in the real estate sector decided to implement an AI-driven coaching platform. The solution allows sales reps to be trained throughout the sales cycle, enabling faster onboarding and leading to higher productivity.

The data provided allows managers to quickly identify employees' individual training needs and train them in the areas where they need the most help. The system provides the ability to listen to live conversations, allowing managers to make real-time solutions and suggestions and effectively coach employees.

The deep insights into customer interactions enabled better alignment of the customer approach across the sales organization. Onboarding of new hires also improved significantly as they were able to implement a workflow that immediately proved successful. This allowed them to bring a high level of productivity from day one, resulting in better morale and lower turnover.

4.14 Sales Efficiency

► **Definition Sales Efficiency Tools** increase efficiency and productivity in the sales department by helping the sales staff to cope with daily, repetitive tasks or by taking them over completely.

Goal: Increasing Sales Efficiency and Facilitating Daily Tasks

Sales teams often miss their targets, not because they are too lazy or don't try hard enough, but because they are often bogged down in daily routine tasks and lack ways to optimize their efficiency. Again, by automating, customizing, and optimizing different parts of the sales process, AI can bring more efficiency to sales, thereby increasing productivity. AI-driven systems can take over individual tasks completely on their own and thus greatly relieve the workload in sales.

Areas of Application

Route Planning AI can optimize routing and territory planning based on the location of the sales rep and other contextual information, such as calculating the fastest routes between appointments and identifying potential prospects along the way. Some systems can even automatically notify the customer of a potential meeting delay.

Contact Management AI can help manage the myriad of contacts across diverse devices and platforms. It will import contacts from various sources such as mobile phones and email accounts, check for duplicates and timeliness, and automatically create a central profile for all contacts where you can track contact information and various interactions (via email, in meetings, and on social media).

Email Management AI can be especially helpful in email management because it can provide much-needed personalization and automation of email activities. For example, AI can learn your typing habits and automatically finish your sentences for you. Or it can help you sort emails more effectively. This way, you don't have to read and weed out irrelevant and unimportant emails, but instead direct your attention to important messages.

Sales Assistance AI can provide virtual digital assistance to sales reps on desktop, laptop, and mobile – all with a highly personalized experience. Basically, they're chatbots that use natural language processing and predictive analytics to help sales reps and sales teams with tasks like lead qualification, meeting scheduling, meeting note capture, data entry, pipeline management, and more.

Tool Examples

Voicea from Cisco attends meetings and captures minutes. Meeting content translates directly into actions, and meeting notes are delivered to the email inbox or other collaboration tools. Voicea works everywhere, whether in video conferences, phone calls or face-to-face meetings.

Knowmail uses AI to optimize the user's email management. The goal here is to manage emails as efficiently and relevantly as possible to reduce email overload for the user. The tool filters the most important messages and summarizes long conversations.

Practical Example**Efficiency Increase in the Sales Process of a B2B Software Provider**

At a B2B software vendor, valuable time was wasted while managing customer data, planning activities, and manually setting service level agreements. In the process, only about 20% of activities were captured in the CRM, and the poor quality of information made it difficult to identify trends and business opportunities and make accurate forecasts.

The company implemented an AI-driven solution that provides insights into results and trends, automatically tracks relevant activities, identifies business trends, and provides key metrics for sales reps. The high quality of the data has enabled the system to achieve 90% forecast accuracy compared to 40% previously.

Within nine months, 15,000 contacts were restored to the CRM system, allowing the marketing department to better target their audiences. Productivity among sales staff has also increased by 15%, measured in orders.

4.15 Sales Management Intelligence

► **Definition** **Sales Management Intelligence tools** are systems that generate advanced analysis of sales performance at all levels – markets, products, customers, sales territories, salespeople, etc. – and enable sales managers to monitor, manage and optimize sales performance.

Goal: Support in Sales Controlling and Sales Management

Effective sales management has always required methodology and tools. KPI (Key Performance Indicators) and sales data analyses are part of this. The problem here is that classic KPIs simply cannot identify correlations between them. With AI, very detailed and critical insights into the performance of the sales organization at all levels are now possible. Predictive analytics not only provide future perspectives, but also project very specific and accurate expectations and sales performance. This greatly improves the quality of decisions at the sales management level, whether they are about goal settings, territory assignments, employee appraisals, or resource management.

Areas of Application

Sales Performance With the help of AI, sales managers can more easily and effectively manage sales and improve sales performance. AI-powered systems predict the future performance of the sales organization and allow leaders to see which sales territories are performing best, which employees will meet their goals and which are lagging behind, which customers are the most profitable, and which deals have a good chance of closing. This allows sales leaders to focus on the areas that need the most attention and concentrate on business fields that hold the greatest potential for the company.

KPI Monitoring AI analytics allow you to drill deeper into sales data and provide a level of granularity that traditional BI tools cannot. The advantage here is that AI-driven systems, unlike traditional analysis tools, recognize the context and relationships between different KPIs. These systems can not only analyze an unimaginable amount of metrics, but derive relevant insights from them, display them adequately in real time, and provide you with recommendations on what to do next.

Anomaly Detection AI systems not only enable KPI analysis, but also detect anomalies in all your metrics and business activities in real time. The system analyzes millions of metrics, detects important signals, processes, and events, and alerts you to potential inconsistencies or unforeseen developments. And not just in the area of the KPIs you specify. The system detects anomalies on its own and gets better and better over time.

Performance Appraisals AI gives sales leaders access to sales figures, customer-related data, customer complaints, and sales rep activity. This enables better performance appraisals than ever before. Employees are evaluated based on facts, not just personal judgment. This empowers management to make better and faster staffing decisions. Basically, AI enables agile employee management and controlling.

Recruiting AI can help find the right employees for the organization. It will independently screen and evaluate countless applications and forward only the most suitable candidates to those responsible. The system can even conduct interviews itself, for example via app or mobile phone, analyze the interview and make a recommendation. Companies like IBM and Unilever are already using AI in the process of pre-selecting applicants.

Sales Territory Planning AI can be used to optimize sales territory planning. It can quickly calculate the TAM (Total Addressable Market) in a given territory and identify the customers with the greatest potential within it. Territory allocation is optimized to the extent that all sales reps are treated fairly in the allocation of regions: whether with the same number of customers or market value.

Gamification Gamification tools allow sales leaders to drive sales performance in a fun way: through contests, leaderboards, and games. AI can offer valuable insights – why, when and how to apply gamification – and opens up a new world of possibilities for traditional incentive programs, with real-time insights and customization.

Tool Example

Anodot uses its patented AI-based technology to monitor all relevant business parameters. The system learns the behavior of specific business metrics, monitors their performance, and detects anomalies in them. T-Mobile says Anodot allows them to catch and respond to incidents one to two hours in advance, before they actually impact the customer experience.

Practical Example

Sales Controlling and Efficiency in a B2B Software Startup

A software startup with a small sales team selling about 100 projects per year was struggling to track sales activity and KPIs across the sales process. Transparency, prioritization, and consistency were the biggest challenges.

The sales management lacked an overview of all activities in the large projects and this could not be managed with email communication or with Excel sheets. Apart from that, prioritizing projects was impossible because there was no overview of the progress of open deals. Consequently, sales resources were not used properly and good business opportunities were inadvertently neglected.

The implemented AI-based solution solved most of the challenges. The system was able to perform all sales analytics, monitor relevant metrics, plan and forecast, support account management, and even create a to-do list for sales reps. The platform enabled better visibility and analytical prioritization of activities and ensured consistent operations across the sales team. Everyone was now up to date on significant opportunities and sales activities, and sales leadership was able to efficiently manage sales resources. Productivity increased to the extent that an estimated four to six hours per week per salesperson were saved – valuable resources for a small company.

4.16 Inside Sales Intelligence

► **Definition** **Inside Sales Intelligence tools** collect, analyze and present information that helps salespeople serve their customers optimally and convert new leads into customers faster and more efficiently. At the same time, they support them in managing sales-relevant tasks.

Goal: Increase Productivity and Performance in the Inside Sales Department

Inside sales staff are often confronted with the need to find the relevant documents and data during a customer inquiry or during a telephone call and to quickly extract the necessary information from them. This usually requires switching between several systems: ERP for order entry, CRM for customer data and service systems to look up the latest tickets. As a result, customer inquiries take a long time to process and are associated with frustration on both the customer and employee side. This is where inside sales intelligence systems can provide the right solution, because they basically solve the main problem in inside sales: getting the right and relevant information quickly. They provide the necessary knowledge at the right time, predict customer behavior and desires, and even make specific recommendations for the business case. They also take over and automate repetitive and administrative tasks and help sales organize and prioritize their daily tasks and deals.

Areas of Application

Customer Knowledge In inside sales, AI can provide valuable insights into customer data. For example, customer behavior: recent purchases, items on their wish list, what they are interested in and what they don't like. Not only that, sales gets insights into customer sentiment, their interactions with the website and social media channels, and in terms of their like or dislike of the competition. AI algorithms scan websites, social media and news and automatically add to customer data: Company, contact person, decision maker, strategy, competition, news, etc. In this way, they form a valuable knowledge database on each customer and contact person, which is made available to sales at the right time and with relevant insights.

Sales Knowledge AI can also make valuable knowledge tangible for sales at the product level and thus increase the level of knowledge and competence of sales staff. AI offers relevant information on the respective product at the right time – for example, during a customer phone call – and makes recommendations for product and product supplements as well as for pricing and the next process steps.

Predicting Customer Needs Powerful AI algorithms listen to the customer conversation and not only identify what the customer wants, but can make predictions based on what is said and suggest to the sales representative suitable offers and solutions that are most likely to meet the customer's needs. This reduces the effort for the individual customer and at the same time boosts sales: because AI is able to identify what customers might need before they need it and proactively offer suitable products and services.

Automation and Reduction of Tasks Customer service departments receive many redundant support requests, and handling them often wastes valuable resources. AI systems can reduce the burden on employees by predicting which group or employee is best able to handle certain requests. It can also recommend specific responses based on ticket criteria, apply a response template to specific requests, and, in some cases, handle the requests themselves.

Task Management AI systems can not only handle tasks themselves, but manage those they are not up to. They organize, prioritize and distribute internal sales tasks for individual employees and for entire teams. This increases efficiency and productivity in the sales organization, getting more done in less time.

Deal Management AI can manage open deals based on parameters such as customer history, product status, terms offered, and customer behavior, with the goal of maximizing company margins, profits, and revenue.

Tool Example

Digital Genius can handle automated customer requests across industries. The system recognizes the intention behind the customer request and responds immediately, for example with a refund. This increases customer satisfaction because it signals to the customer that their request is being taken seriously and will be dealt with quickly. Apart from that, it reduces the time it takes to process inquiries, which increases productivity. KLM and Runtastic use this platform.

Practical Example

AI-Supported Order Entry of Car Spare Parts

An automotive component supplier faced the challenge of improving its order-taking process. Customers placed orders over the phone, and the inside sales staff had to record name, dealer number, order number, and part number, as well as check live availability. The average order processing time was around ten minutes and caused high frustration among customers, in connection with long waiting times and call-backs, errors in entering the part number and the associated complaints and returns.

To solve the problem, an AI-driven virtual assistant was developed to help customers order parts and check availability in natural language with intuitive, conversational navigation. The virtual assistant instantly recognizes the customer's previous orders and matches the details with them, thereby ensuring the accuracy of the order. It also has pre-trained language models to understand industry acronyms, accents and even spare parts syntax.

The system enables end-to-end processing of initiating, verifying and confirming a specific order part in a single conversation session – without data entry, forms or 32-digit part number entries. This has reduced the average processing time from ten minutes to less than one minute. In just a few months of operation, the system has successfully filled more than 8000 orders per month, processed more than 2 million user requests, and achieved 99% accuracy in order fulfillment, far surpassing human accuracy.

4.17 Customer Relationship Management Intelligence

► **Definition Customer Relationship Management (CRM)** tools are systems that support the entire process of planning, controlling and executing all customer-related activities across departments.

Goal: Increase Efficiency in Customer Management, Improve Customer Relations and Increase Customer Loyalty

CRM systems are not a novelty, they have been used in sales for decades. However, they are unpopular with salespeople because they involve a large and tedious amount of administration. But with AI, that's changing drastically. Statista estimated that by 2021, the use of AI in CRM activities could generate an additional \$394 billion in revenue in the US alone (Liu [2018](#)).

CRM used to be simply a classic sales tool, but today it is a holistic central platform for sales; marketing, service, sales and customer management. AI can assist with all of these interaction points and brings exciting new developments to CRM software, such as facial and voice recognition. Salesforce's Einstein and Zoho CRM's Zia are two examples of AI-powered CRM that provide access to information via voice commands.

Areas of Application

Data Quality High data quality is extremely important for a functioning sales department, because forecasts, sales activities, resource allocations and performance assessments are based on it. According to research by Dun and Bradstreet

(2004), 91% of data in CRM systems is incomplete, 18% is duplicated, and 70% becomes outdated annually. AI brings the solution here, as it can not only ensure completeness and accuracy of data, but also augment it with valuable information, such as behavioral data, demographic information, indicators from public databases, social media interactions, propensity to buy, and real-time scores for current leads.

Data Collection With AI, tedious data entry in CRM systems is a thing of the past. With a single click in Outlook, an email address becomes a lead in the CRM system, including all necessary data. Email communication, offers and attachments are automatically filed, phone calls are transcribed and recorded in the right place. NLP-based systems can generate and file an appointment report from a voice recording after the customer appointment. Some of the data capture can be completely automated, without any interaction on the part of the sales rep: email, meetings, calls, SMS, activity tracking, contact data, company data, opportunity information, quotes, presentations, etc.

CallMiner Eureka, for example, uses AI and NLP to capture and transcribe customer interactions. The transcriptions are tagged according to key themes and a rich categorization scheme. When fed into CRM, this data can be used to extract key insights, including customer objections and also competitor information. Sales reps can search the transcript metadata for keywords, phrases, or even auditory characteristics, such as heightened voice intonation, which can signal excitement and heightened interest. Using topic clusters, sales reps are able to identify key customer trends.

Customer Insights and Analytics AI is transforming CRM systems from traditional data stores into trusted advisors for sales. AI assistants can not only perform complex customer analysis, but enable sales reps to make informed decisions. AI uses the relevant data it has access to, offers specific insights on customers, and generates targeted recommendations from them. It also justifies its recommendations and informs sales reps why the algorithms identified that course of action. Sales reps no longer have to sift through umpteen data feeds to glean important information about their customers; instead, they have access to key insights anytime and anywhere and can take direct action.

Planning Planning has never been the strong suit of salespeople. Salespeople are usually people who want to interact with customers and have no desire to deal with data in confusing Excel spreadsheets and plan numbers. Thus the most forecasts made by individual employees are nothing more than a gut feeling, sometimes better, sometimes worse. AI algorithms can take this unpopular task off salespeople's hands and create more accurate predictions than an individual employee ever could. In doing so, employees don't have to do anything, as AI even provides insights and derives recommended actions. Pipeline management and forecasting become not only a breeze, but an important tool for achieving goals, not only for management, but also for individual sales reps.

Customer Communication AI integrated into CRM systems can optimize customer communication on several levels and even take over some of it. With targeted and prescriptive recommendations, it improves the customer relationship and creates personalized messages and makes email suggestions to salespeople. In addition, chatbots can interact with customers on their own, answer simple questions, and automatically record conversations in the CRM.

Task Planning AI can take over the daily task planning related to customer interactions and provide the sales rep with a to-do list every morning. This way, the employee doesn't have to sort through and prioritize the tasks at hand. The machine does that for him: it organizes the tasks based on their importance and urgency, but more importantly, based on the likelihood of success, and focuses sales resources on the areas where business can be brought in most quickly and effectively. All this in a single system: CRM.

Tool Examples

Salesforce is one of the first CRM vendors to integrate AI capabilities. In September 2016, it introduced its AI tool called **Einstein** for selected modules.

- **Einstein Discovery** leverages your CRM data as well as other internal and external data sources such as your website, email marketing campaign results, or social media to provide detailed customer behavior information.
- With **Einstein Prediction Builder**, users can create custom predictions, such as calculating the probability of customer churn.

- **Einstein Next Best Action** makes recommendations to your staff based on past interactions and collected data: for example, the preferred method of contact (phone call or email) and the preferred time of day to engage with each customer.
- **Einstein Language** detects customer intent in multiple languages and can detect sentiment in texts. It analyzes various forms of customer interaction with your company, such as emails, filled forms, notes, or chatbot conversations, as well as scans texts and detects sentiment.
- **Einstein Bots** answer frequently asked questions independently and free up employees to devote their time to more important tasks.
- **Einstein Vision** can classify images, recognize objects and read texts. For example, you can take a picture of a business card and the system will load all relevant contact information directly into the CRM.
- **Einstein Voice** connects with Siri, Google or Alexa and gives daily briefings to sales reps. This gives them a quick overview of their daily schedule and informs them of any new updates.

Other CRM systems that offer AI-powered functionality: **Microsoft Dynamics, Hubspot, Zoho, Sugar CRM, Pipedrive, Adobe, SAP, Oracle.**

Practical Example

Personalized Product Recommendations in CRM

At a provider of outdoor equipment, product recommendations for customers were generated manually. On the one hand, this process took a lot of time and on the other hand, the recommendations were not personalized for the respective customer.

To improve this process, the company used the Einstein recommendation engine. The system analyzed customers' historical data, buying behavior, and preferences to offer relevant recommendations, including complementary products. This resulted in a 9.6% increase in conversion rate and a 15.5% increase in revenue per customer. Additionally, Einstein Activity Capture was able to eliminate one hour per day per sales rep of manual data entry.

4.18 Conversational Intelligence

► **Definition** **Conversational AI** refers to the use of messaging apps, voice-based assistants, and chatbots to automate communication with customers and create personalized customer experiences at scale. We're talking about chatbots: computer programs that simulate human conversation via text or audio messages.

Goal: Provide Customers with Convenient and Diverse Communication Channels

Technological progress has fundamentally changed the way we communicate. Smartphones, social networks, messengers and apps have become an integral part of our communication habits and are taken for granted. We have long been accustomed to this convenience in our private lives, and we also transfer these expectations to our business lives or expect similar experiences from providers.

For the modern omnichannel customer, it is now a matter of course to have access to information anytime and from anywhere, and they are no longer willing to accept restrictions here. Chatbots can respond very well to these expectations, because they offer a simple, convenient and unrestricted communication channel that is highly accepted by customers: Nine out of ten consumers want to be able to communicate with a chatbot. They are particularly popular with the younger generations, who actually prefer chatbots to normal telephone conversations.

What are chatbots? Chatbots are independently running programs which, once initiated, perform their services automatically and repetitively as far as possible. In the process, they learn and, in the best case, can make decisions themselves. They can be found in a number of places today, including websites, Facebook Messenger, iMessage, display advertising, and other channels. In most cases, they answer more than just support questions – they actually enable people to discover the products they like and want to buy. As such, chatbots are experiencing real hype and are expected to replace traditional apps. This is because, unlike apps, they are quick, easy and inexpensive to develop and do not require any download or log-in on the customer side.

The advantage of AI chatbots is that they can handle multiple conversations with thousands of customers simultaneously without errors. This can dramatically

increase customer service productivity as well as save on operating costs. Chatbots are available 24/7 and can serve customers instantly regardless of the time of day. Your customers no longer have to wait on hold for long periods of time and are always met with friendliness and courtesy. Chatbots always remain polite, regardless of how rude the customer is, thus increasing customer satisfaction and loyalty. Provided the chatbots are programmed with all the necessary information, there is no possibility of errors, accuracy is guaranteed and thus typical human errors can be avoided. For example, they can take orders and bookings on their own, and when faced with a complex issue, they involve an employee.

Besides all the advantages chatbots offer, there are also some disadvantages to consider. The high desirability and ability to deploy them cheaply and quickly can lead to the market being flooded, with everyone fighting for the same customer. With easy access, they also have the potential to become the next spam channel. Fake bots on social media offer a taste of this. Security and GDPR concerns aside, chatbots are not yet sophisticated enough to understand user intent with 100% certainty. If they misinterpret human emotions and feelings, it can have huge negative brand implications. There are many examples of poorly set up bots that annoy customers instead of helping them.

There are now a number of different chatbots that are used in retail, customer service, customer advice, customer onboarding, e-commerce and assistance. For example, you can book an Austrian Airlines flight via the AI-controlled Facebook Messenger and have Zalando's Fashion Companion recommend an outfit to you.

There are also tons of application areas for chatbots: support bots, learning bots, sales bots, FAQ bots, information-on-the-go, qualification bots, foreign language assistants, therapy bots, digital friends, digital assistants, meeting planners, conversion boosters, quick-payments bots, recommendation bots, helpdesk bots, diagnostic bots, pricing assistants, quick-review, onboarding bots, monitoring bots, fun bots, survey bots, update bots, product discovery bots, etc.

As you can see, there is no shortage of choice, and as a result there is chaos among the providers and their options. But all these bots can be grouped into categories according to their operating principle (see Fig. 4.2).

TYPES OF CHATBOTS

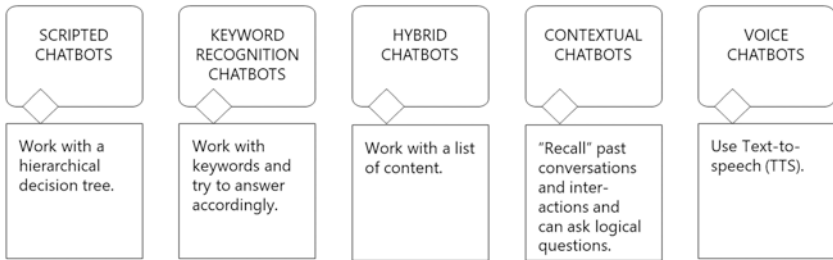


Fig. 4.2 Types of chatbots

Areas of Application

Scripted Bots This is one of the simplest chatbots that is known for its quick response capability. It works with a hierarchical decision tree. The questions are predefined and the user has to select an option from the available menu. The chatbot guides the user through the decision tree until all the questions are answered. The problem with these bots is that they ask the same questions over and over again when they don't understand the user's intent.

Keyword-Recognition Based Bots These chatbots are based on keyword recognition and are more complex than a scripted bot. They try to understand the keywords that the user enters and respond accordingly. These chatbots fail when a user enters similar keywords because they display redundant data.

Hybrid Chatbots These chatbots are menu-based: The user has the option to choose from a menu list, or he can enter a query.

Contextual Chatbots Such chatbots remember the past conversation and ask logical questions after reviewing the past interactions. They use machine learning to incorporate previous conversations and interactions with the user.

Voice Chatbots These are the super chatbots because they communicate in natural language and use voice as input. Customers can ask them specific questions and receive personalized recommendations. And they do this while driving or when their hands are full and simply because it's more convenient than typing. Because of this ability, they are predicted to have a great future.

Tool Examples

Mitsuku is one of the best chatbot platforms that has also been honored with the Loebner Prize, the highest award among chatbots. One can converse with Mitsuku for hours without seeing a pattern of predefined responses. Not only that, Mitsuku excels in its ability to perceive language and mood to respond to your questions accordingly. This bot can chat about anything, which is what makes it so human-like, unlike other bots that serve a single purpose.

Acquire is an AI chatbot that drives natural human conversation and works alongside your customer service team. It understands customer queries, captures context, and answers questions by accessing existing knowledge bases like FAQs. It can be trained in a “bot camp” until it's ready to answer customer questions and qualify leads on your website or app.

Imperson is an AI chatbot platform that creates enterprise chatbots with audio, video, text, AR, and VR capabilities for all major messaging platforms. Their interactive bots provide real and engaging chat experiences. Plus, the platform provides a holistic bot solution by hosting your bot, deploying it, and enhancing its capabilities in real time.

Practical Example

Virtual Assistants in the Consumer Sector

Virtual assistants are increasingly used in the consumer sector, for example for ordering and delivering products via popular messenger applications such as Facebook Messenger or WhatsApp. A good example is a pizza delivery company that uses a chatbot to enable customers to order pizza quickly and efficiently via Facebook Messenger.

Another good example is the chatbot of a flower shop that uses an IBM Watson-based AI chatbot to help customers order flowers and gifts through its online system. As time goes on, the Virtual Assistant becomes “smarter” and is able to provide customers with a personalized shopping experience that is specifically tailored to their needs.

Other good examples can be found in retail and e-commerce companies that use chatbots to help customers order more efficiently and quickly. In doing so, they focus on the individual needs of the customer and save the user time by intelligently pointing them to products that match their price point, gender, and preferences.

4.19 Lead Intelligence

► **Definition** **Lead intelligence tools** are systems or platforms that support, optimize and automate the process of lead generation and their management up to conversion into a customer in all its individual steps.

Goal: Optimization of the Processes of Lead Generation and Conversion into Customers

In order to generate leads, marketing departments set up marketing campaigns to the best of their ability and then hope that they will be well received by potential customers. With AI, however, the days of hope are over, because it can not only support and even completely take over the process of lead generation and lead management, but also greatly optimize it. Sales also no longer have to do their own research to qualify leads and understand how best to address them.

Studies show that up to 50% of sales time is lost in the unproductive processing of leads, and this is where AI can step in and relieve sales of these time-consuming tasks and even do them better. This is because the process of lead management in sales is largely based on the personal instinct and experience of the salesperson in question. AI doesn't rely on a gut feeling, it relies on data.

AI offers numerous benefits in the area of lead generation by providing sales with valuable insights into the customer's decision-making process through the collection and analysis of useful lead data. It also independently generates leads, identifies which ones make sense to follow up on, and maps the best path to the best time for the sales rep to increase the likelihood of conversion.

Areas of Application

Lead Generation In the area of lead generation, AI can optimize and take over entire processes. AI search bots autonomously scan the internet for potential customers – whether on websites, platforms or social media – and deliver pre-qualified leads to sales. Moreover, it can personalize your website for your website visitors and will also engage them via a chatbot. The software makes real-time adjustments based on how the customer interacts: whether with your website, with your ad, or with your content. It not only optimizes your ad placements in real time, but also the bidding process for the ads, generating more leads for less cost. The bottom line is that it reaches and engages potential customers through the right channel on the right platform at the right time, providing them with personalized experiences and generating a new pool of relevant leads without the need for additional intervention from sales reps.

Lead Engagement and Nurturing AI technology actively engages, interacts and communicates with potential customers, providing them with relevant information as it guides the customer through the sales process in a targeted way. It observes and interacts with leads until they are ready, and then hands them off to sales. This way, no lead is lost, and sales reps can focus on other revenue-generating activities in the meantime.

Lead Qualification Using available information and behavioral analytics, AI qualifies leads, calculates their likelihood to buy, and prioritizes them accordingly. A good example of this is Einstein from Salesforce, which offers an automatic lead scoring function.

Lead Scoring AI can analyze leads based on criteria that are usually hidden from sales reps, making the scoring process much more accurate. AI algorithms mine customer data, track their social media interactions, analyze their behavior and communication history (emails, posts, chats, call center calls), and sort the lead pipeline based on calculated priority. This ensures that sales engages with the right leads at the right time.

Lead Prediction One particularly promising application of AI is so-called “predictive lead scoring”, which identifies and evaluates new business opportunities. Among other things, it predicts the probability with which an offer will lead to an order. Individual influencing factors are identified that affect this probability – whether positively or negatively – and with which the offer can be optimized.

Lead Follow-Up AI can not only hand over or prompt the right leads to sales for processing at the right time, but it will also offer the best time to contact them as well as suggest the best communication channel (email, phone) and also provide the appropriate phone number. It will highlight the customer’s preferences, determine their buying criteria and provide feedback to the employee.

Lead Management AI-based lead management systems combine several of the above functionalities and automate most and even all of the lead management process. The bots generate leads, qualify them, communicate with them and classify them into the right categories.

Lead Insights AI profiles individual leads, providing valuable insights into your prospects: for example, the customer’s sentiment, their interactions with your company, as well as the competition. This information gives sales the ability to better target leads and convert them into customers faster.

Tool Examples

OneSpot uses AI for real-time personalization of online content for customers and potential leads. Based on the profile that emerges from search behavior and consumption habits, the software presents highly relevant and personalized content to your website visitors.

Conversica offers an AI-based Virtual Assistant that autonomously interacts with contacts, prospects and customers via email, SMS and online chat. It initiates human-like dialogues with potential customers, analyzes their behavior and determines their interest in purchasing additional products or services. It records all of this autonomously in the CRM.

Practical Example

Doubling Sales Through AI-Powered Advertising

A motorcycle manufacturer doubled its sales by using AI in a weekend promotion, selling 15 bikes instead of the usual eight in a weekend.

The software analyzed how customers interacted with the ad and was able to determine that there were significantly more responses to ads that said “Call” compared to ads that said “Buy!”, to which it responded in real time and changed the ad. This alone increased the reactions to the ad by 447%.

Furthermore, it analyzed the characteristics of those who already bought products in the past, added them to the shopping cart or stayed on the website the longest compared to other website visitors. Based on the characteristics and criteria of this group, the system profiled potential “alike” customers and identified those as high quality leads.

4.20 Sales Prospecting Intelligence

► **Definition** **Sales Prospecting Intelligence Tools** support the process of customer acquisition in all its steps.

Goal: Increasing Efficiency and Effectiveness in the Customer Acquisition Process

Prospecting is the most difficult and resource-consuming process in sales, which is also associated with the greatest frustration. AI can optimize and take over the intensive research process here on the one hand, and equip sales with relevant information about the entire process on the other. In addition, AI increases acquisition effectiveness by identifying potential customers faster and better and providing more relevant information about them.

Areas of Application

Target Customer Profiles AI algorithms find patterns in your existing customer base. They identify characteristics outside of the classic target group criteria that your best customers have in common and model a very accurate target customer profile from them. Unlike the rigid target customer profile from traditional marketing, the AI-powered profile becomes more accurate with each new customer and piece of information. AI generates dynamic buyer personas (target group profiles) that evolve independently with each new customer interaction and get closer to your real target group.

Research It then uses this profile to find other potential customers in the digital space, so sales reps no longer have to spend a long time calling contact lists and qualifying leads on the phone. Instead, they continuously receive current and relevant leads that they can follow up on.

Personalization AI not only identifies potential customers, but also provides a good conversation starter for the employee: it finds relevant company data and useful information that sales employees can use to address each prospect personally. This significantly increases the chances of prospecting success.

Support in the Acquisition Process In complex and long sales cycles, the acquisition process can stretch out for months, if not years. Beyond this period, AI continuously delivers relevant news and updates about the specific prospect that support the sales force: Company strategies, merger and acquisitions, personnel changes, expansion, etc.

Buying Center In complex B2B business decisions, many people are often involved on the customer side: the so-called buying center. All of these people have their own and sometimes different interests in the buying process, which the sales department must address in a targeted manner. AI provides relevant information on each person in the buying center and helps to identify and consider their interests.

Decision-Maker AI helps sales to identify and gain access to the decision makers in the customer's executive committee, as they are usually well shielded. Here, AI can identify the relevant people along with their contact details and also suggest the most effective way and manner to contact that person.

Tool Example

Qualifier.ai automates the search for leads and their contact details and makes it easy to get in touch with them. The tool uses your customer data, analyzes it to define the best target groups, and scans the Internet for other potential customers who match this profile. Sales reps get access to relevant data for their prospecting activities and can see, among other things, how and when prospects read, click or reply to their emails.

Practical Example

Lead Generation in B2B Food Distribution

A food retailer that supplies major customers such as restaurants and catering businesses decided to use an AI search bot to make the prospecting process more efficient. Based on the criteria of the existing customer base, a target group profile was created and the bot began to independently search the Internet for suitable customers. The more criteria were met, the more relevant the potential customer and the higher his scoring.

Now, sales gets leads on an ongoing basis that they can actively address, and the system automatically updates all data in the CRM. Sales reps work as usual in their CRM system and don't have to search or fill in contact details. The employees get valuable insights and background information about the potential customers, which they can use in their acquisition process.

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Looking to the Future: How AI Will Change the Sales Role

5

Abstract

Artificial intelligence is both a tangible reality and a vision of the future. It is already fundamentally changing sales processes and activities and requires new skills from sales organizations and sales staff. In the long term, it will eliminate a number of roles in sales and transform the remaining ones. No stone will be left unturned, but that's a good thing. Because with its possibilities, artificial intelligence opens up new potentials for sales and addresses modern customer needs and expectations in a more targeted way, thus enabling sales to do its job better than ever before and have a lot of fun in the process.

Predicting the future is always difficult, but we can make an educated guess about what might happen tomorrow based on developments today. AI is already a tangible reality nowadays, but it is far from having developed its full potential. Because of the rapid and fundamental changes it is bringing to the sales field, it will cause sales jobs to change dramatically and require different skills in the years to come. In any case, this development seems so real that there is often a debate about whether AI will replace employees and to what extent it will change future sales organizations. Opinions are divided on these issues, and people are unsure whether to bet on AI today or rather wait. It's often overlooked that while AI is providing the impetus and offering many opportunities for sales, the truth is that it's the customers who are driving adoption and development of the AI

technology. And they're not waiting for organizations that take too long, they're switching to innovative vendors that give customers the experiences they expect and are intrigued by.

5.1 Will AI Replace the Salesperson?

As far as this question is concerned, we are dealing with two extremes.

On the one hand, we have the AI hype, where much and controversy is transported under the topic, often with little relation to reality. There is a lot of fear mongering that sales jobs will disappear as activities are automated and taken over by robots. This sounds alarming, but often such reports are more about the headline itself than derivations from sound studies and expert opinions. The fact is that, from today's perspective, it will be a very long time before machines have the upper hand – if ever.

On the other side, we have the ignorant. These are those who claim that nothing will change in sales, especially in B2B, because personal contact is the decisive factor in sales. Again, the reality is different: Today we are dealing with a new type of customer who is disloyal, anonymous, independent, very informed and impatient, and who no longer wants to involve sales in his decision-making. He sees no reason to do so, because he believes he knows what he needs and is convinced that he will find the solution on his own. The fact is that sales is no longer involved in the customer's procurement process as it used to be. An estimated 70% of the procurement process takes place behind the scenes, which sales no longer has access to. Face-to-face is still important, but with a different focus and only in a small part of the sales process. Unfortunately, many organizations ignore this fact, which is now backed up with facts, and overestimate the importance of face-to-face contact in their sales processes.

- The truth lies in the middle: AI will neither replace nor ignore sales. It will complement sales in a valuable way by becoming an additional resource and being strategically integrated into the future sales organization.

A study by McKinsey (Court et al. [2015](#)) examined the tasks and activities of more than 750 different occupations in the United States and analyzed which of

these tasks could be automated. The study found that more than 50% of daily sales tasks could be automated with technology already in place. The study only looked at existing technologies and did not attempt to consider future advances in artificial intelligence and automation. When you read something like this, it's easy for salespeople to worry about their own future. But just because technology can automate individual aspects of a job function doesn't mean it will take over the entire role.

- In reality, technology does not replace sales activity, but transforms it into a meaningful activity where one is primarily engaged with customers and revenue generating activities.

Today, the sales department spends only a small part of its time actually interacting with customers. A lot of resources are spent on administrative activities, research, and lead generation and qualification. This is where AI can provide the necessary relief and basically take over all the activities that are unpopular in sales: Data entry and processing, planning, forecasting, analytics, research, admin activities, task management, etc. Moreover, AI will evolve into a centralized source of information so that instead of having to deal with disparate systems and searching for information, salespeople will have instant access to relevant insights that will help them in their sales activities.

And it goes even further: AI makes it possible for every salesperson to have a personal assistant (similar to Alexa, Cortana, Siri ...) who will help them do their job, coordinate appointments and meetings and manage the flood of emails. The dream of many sales people becomes reality!

The bottom line is that salespeople will benefit fourfold from AI in the future:

1. **More time for customers:** Sales employees have more time for their customers because they don't have to spend a lot of time on administrative tasks and data entry. The systems take care of that themselves.
2. **Better customer understanding:** Salespeople develop a better understanding of their customers and their needs, can respond to them more effectively, and identify more business opportunities more quickly.
3. **Faster response:** With AI, the focus is on the right deals at the right time, nothing is lost or done too late. Especially with high-value opportunities, fast reac-

tion is an important success factor, and AI can ensure that you don't disregard them here. In addition, AI can predict possible developments and provide recommendations for action.

4. **Better customer retention:** Digital assistants support sales in maintaining customer relationships. They offer customers the possibility to get in touch from everywhere and at any time, communicate with them independently and recommend appropriate next steps for the respective business transaction to the sales department. In addition, they help to "anticipate" customer wishes and to respond to them in a personalized manner, thus strengthening the customer's loyalty to the company.

Looking ahead to this future, AI has the potential to take over a lot of today's sales activities. In the future, it will be able to do almost everything for the salesperson: prioritize tasks, generate leads, communicate with customers, calculate prices, configure quotes, alert the salesperson about deadlines and necessary actions, file documents, capture reports ...

Does this mean that salespeople will no longer have to think for themselves? On the contrary, sales will use their thinking skills in a new way: Instead of thinking about when to send a document to the customer, sales will use their intelligence to generate more business and better meet customer needs. The bottom line is that valuable, expensive, and now rare sales resources will be directed toward breakthrough sales activities.

Consequently, certain roles in sales are also taken over by technology. Everything that has to do with administration, order processing, data collection and analyses will be substituted. Subsequently, sales roles that require only basic knowledge of products and their functionality or only simple communication skills will also be replaced by AI.

Basically, in the long run, AI will eliminate those sales roles that don't directly generate revenue. And that's what we want, because if sales is busy with administration, it doesn't add value to the company, it just costs a lot of money. Future sales roles will shift to those activities that require human intelligence: Leading strategic conversations, working out complex solutions to problems, and building and maintaining human relationships.

- At the end of the day, experts agree on one thing: the sales job is not going to disappear.

AI is not ready to lead human interactions, and selling is an inherently human act. Customers are people, and people crave a genuine personal relationship. You can't teach a person, let alone a machine, to be interesting, charismatic, or inspiring. There is an emotional component to sales that simply cannot be replaced by algorithms. The human touch is what will allow salespeople to keep their jobs. After all, to be successful, salespeople must genuinely care about helping customers. And top salespeople excel at creating and maintaining genuine relationships with potential customers.

- Sales profession is here to stay, but it is transforming.

Automating sales activities means accordingly changing sales roles and responsibilities. For example, if you automate pricing, it's difficult to hold the manager involved solely responsible for the revenue generated because a significant part of the margin calculation is now done by a machine. As responsibilities shift within the organization or are eliminated altogether, companies will need to adapt and redefine sales roles and performance measures.

The role of sales is changing as a result of technological capabilities, and salespeople will have different responsibilities and need new skills to keep up with market developments. As technology-based sales enablement tools get better, salespeople will need to get better and build their skills. Ultimately, it will be about understanding how to use technology to strengthen the skills needed in sales.

It should also not be overlooked that customer needs and expectations will also be influenced by technology, so sales will also need new competencies here in order to be able to respond to the changes in customer behaviour. More consultative functions will be needed to help customers make good decisions. The main task in sales will be to provide customers with new perspectives relevant to their decision-making process, which is a very human task and cannot be done by machines. Thus, salespeople will need to develop business competencies to *truly* understand

the customer's business and needs and – with the support of technology – serve them better and faster, bringing them valuable insights that will help them achieve their goals.

Accordingly, the answer to the question posed in the heading is:

- ▶ Humans *with* machines instead of humans against machines. The interplay between human and machine intelligence will bring true success.

Sales leaders need to ask themselves the question: How can AI technology increase the overall intelligence of the sales organization? Basically, you'll need the technology to reach and guide the customer in that part of their buying process where they don't want to grant access to sales people and providers. And you're still going to need the human capabilities to support the customer – when they seek contact – in their decision making process and to provide insights and perspectives that are specifically relevant to them.

5.2 How AI Will Influence the Sales of Tomorrow

There is no doubt that AI has the potential to significantly increase performance in sales. Unfortunately, we are still a long way from actually realizing this potential. The Wonderland analogy has a point, because while AI opens up a world of possibilities for us, many of them are not yet realizable to the extent that they fully deliver on their promise. Some is still a dream. Even though AI offers fascinating possibilities, many of the tools available in the market today are not yet fully developed and are just learning. Quite a few of the currently available solutions are stand-alone solutions, and while they can already make a lot of things possible in their respective areas, an overarching AI platform is needed to realize the full potential of AI.

- ▶ A central AI platform will be the sole source of information for sales.

A central platform is the basis for overcoming the boundaries between the individual systems. Today, the majority of sales information resides outside of CRM: emails, meeting reports, presentations, documents, quotes, attachments, phone calls, follow-ups, sales data, customer reports, target agreements, contracts, etc. And all of this in multiple places: email, laptops, hard drives, ERP, portals, CMS, cloud systems, paper folders ... all silos. All this data needs to be integrated into a central platform for AI to reach its full potential. Because its true potential lies not in capturing data, automating processes, and providing information, but in drawing insights from all that data, enabling sales to better identify and meet customer needs and turn them into business outcomes.

- ▶ AI creates the best conditions for designing new customer experiences that are smarter, more personalized, and more predictive than we could ever create without its help. This inevitably leads to more sales, revenue and market leadership.

In such a world, salespeople would have primarily face-to-face customer interactions and be confident that the information they use is proven and accurately tailored to their customers' needs. For such a world to become a reality, it is fundamental that the sales organization and salespeople understand the added value of AI technology and recognize that it can only make them better. That being said, AI needs to be given access to the business core and the full scope of the company's data so that it can spread its wings far and wide. Most of the AI sales tools available today only touch the tip of the data iceberg. The goal is to make correlations between data, systems, information, results, people, and activities and generate and use insights from them.

- ▶ AI will be the most widely used technology in sales.

Even if this vision is still pie in the sky from today's perspective, you have to be aware of the fact that AI technology is developing rapidly. Just one or two years ago, one could not have imagined so much progress in some areas, and now these possibilities are becoming tangible and concrete solutions are emerging. There are now quite mature tools that are already working well in their fields, and so AI is

approaching this vision of the future day by day, step by step and unwaveringly. The dream can become reality faster than you might think.

According to the 2018 Salesforce State of Sales report (Salesforce Research 2018), 21% of sales leaders say their organizations are already using AI today, and 54% expect to use AI in the next two years. With an annual growth rate of 155%, this is the fastest growing sales technology. Given the wide range of opportunities AI holds for sales, it's no surprise that major investments are planned here. However, it is important not only to invest in technology, but also to create an understanding of the added value of technology across all parts of the sales organization. After all, sales staff not only need to learn how to use the technology, they also need to develop the skills to generate added business value from it.

► AI brings marketing and sales together.

A recent study by Harvard Business Review (2019) found that 82% of large companies believe AI has the potential to bring sales and marketing together. The traditional separation between sales and marketing, as it existed in the past, is already no longer possible. The traditional process of marketing generating leads and handing them over to sales for conversion no longer works today. Today, the customer is not at the end of the process, but at its center, and is addressed by marketing and sales interacting throughout the customer's buying process. AI can significantly support this process by providing marketing with real-time feedback and insights into target audiences, and sales with a 360-degree view of the customers and their interactions with the company along their customer journey.

► The human role of relationship building comes to the fore.

In summary, AI is best placed for sales to build better relationships with customers. It recognizes potential prospects, identifies their needs and likelihood to buy, finds the right people in the buying center, and provides relevant information in order to better target customer needs, but it can't build relationships and trust. That's left to humans, and that's the core of the new sales role in the AI-driven sales future.

5.3 How AI Is Reshaping Customer Needs and Expectations

We're still in the early days, but AI is already starting to influence customer behavior and expectations, and much faster than we realize. AI has already entered many areas of our lives – albeit unnoticed – and is fascinating us by providing a high and immediate level of comfort. It caters to our individual needs and responds quickly to our impatience. As a result, it caters to modern consumer characteristics: Impatience, Convenience and Enthusiasm. Because we want the best and the latest, preferably immediately and in a highly convenient way. And what other benefits and impacts does the use of AI have from a customer perspective?

- **Customers love convenience and get used to it.**

We've already seen with online shopping how quickly convenience can influence our behavior. This convenience will increase significantly with the development of AI: It can, for example, save us the hassle of the authentication process through facial and fingerprint recognition, as well as use speech to enter search terms. The better the experience, the faster the initial barriers will disappear, and customers will increasingly use voice control instead of text input. *Because it's more convenient.*

- **Customers enjoy the time they gain.**

AI makes our lives easier and more convenient, and as AI-powered systems become more reliable and powerful, we will all start to have higher expectations of AI and “outsource” more activities to it. Why spend hours searching for the right vacation spot or hotel and compiling a list of options for it, when a software that knows all your preferences can do it for you? And much faster than you ever could – and in less time than a travel agent, too. AI can give us a quick overview in the ocean of alternatives available today and select the best options based on our preferences. We are happy to invest the time gained in other activities that are more fun. So we gladly leave these activities to it. *Because it is faster.*

- **Customers develop trust.**

Virtual assistants quickly find suitable products and save us the time-consuming search through countless pages of virtual catalogues. The better these assistants perform, the greater the trust in the brand. The convenience offered increases customer satisfaction and loyalty. Customers become more loyal and also have no problem giving up their personal and behaviour data in exchange for personalized experiences. *Because it's useful to them.*

- **Customers no longer want to wait and deal with complicated processes.**

Customers today expect the entire customer experience to be as natural as possible, without unnecessary interruptions. Any perceived disruption in the buying process can lead to people simply abandoning the process and switching to an alternative. Once the decision is made, customers want the buying process to be as simple and quick as possible. And when they do want contact, they expect an immediate response from you and aren't willing to hang on hold or wait until your call center opens Monday morning. The more and better options AI technology gives them, the less patience your customers will have when dealing with traditional structures and approaches. *Because it's too tedious.*

- **Customers no longer tolerate flawed or counterintuitive processes.**

It's not just impatience that plays a big role. Customers expect and require a perfect customer experience. They won't tolerate a non-customer friendly experience anymore, they'll just leave you as soon as they find a better option. *Because they don't need to rely on it anymore.*

- **Customers expect personalized experiences.**

Customers expect tailor-made offers and approaches. In doing so, they want providers to truly understand their needs. Just because someone has liked several pictures of a newborn baby doesn't mean they are interested in baby advertising. Customers don't want you to sell them something, they want you to truly understand them and their needs. If the company properly understands the data and takes the relevant steps in relation to it, it has the potential to provide a unique customer experience. The result is higher customer satisfaction combined with more revenue for the business. *Because they value personal attention.*

- **Young generations are promoting the AI experience.**

Once customers experience the thrill and benefits of AI, they realize that they can benefit from this wave. Yet young people are the ones who are rapidly driving these developments with their behavior. They are more intrigued by commercial AI capabilities than older generations. Millennials, for example, are committed to the development of virtual personal assistants, and almost half of this generation agrees that they are among the best technological developments to date. That being said, they prefer communicating with chatbots over personal phone calls. *Because they're used to it.*

- All in all, AI is highly accepted by customers because it provides speed and convenience, saves them time and tedious searching, simplifies the flawed and tedious processes on the provider side, addresses them personally and at their needs, and because they no longer want to do without it. That's why companies can't ignore customer expectations when considering technology adoption. Because your customers are the true drivers of technological innovation.

In conclusion, AI has a bright future because it brings great benefits, both for businesses and customers. This is because companies implement technology, to which customers respond positively, and subsequently change their behavior, to which companies must respond again. It's a benefit cycle where the relationships and expectations of both sides reinforce each other.

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What to Do: Recommendations for Action for Sales Organizations

6

Abstract

Anyone who wants to implement artificial intelligence in their own sales department must first ensure the right perspective in the context of a strategic approach. Various AI specifics have to be taken into account, regardless of whether it is the development of the AI strategy, the creation of technological and organizational prerequisites for the AI implementation or the criterias of the first AI project. Introducing AI into sales organizations is not a stand-alone project, but an AI journey if you want to take real advantage of the many opportunities AI technology offers. This journey should start thoughtfully and be strategically planned.

AI may still not reach its full potential for several years, but there are already many ways to integrate this technology into modern sales operations. In fact, AI is already being used in leading companies and is gaining more and more acceptance within sales organizations.

The good news is that small and medium-sized businesses can also start benefiting from this technology now. In fact, there is nothing to stop you from doing so. All the supposed obstacles are primarily misunderstandings that I hope to have cleared up, and by the time you read this chapter at the latest, the last doubts should have been elucidated.

Basically, you have to do one thing: take the first step, which is to create the right perspective within the organization. Because this very first step is also the most important step for the implementation of AI within a sales organization.

6.1 Creating the Right Perspective

AI is often viewed purely from a technological perspective. It is obvious, as it is technology, and technology has the goal and ability to achieve optimizations in existing processes through technical innovations. As a result, AI initiatives in many companies are primarily given an IT focus. This path is unfortunately misleading because it severely limits the potential of AI technology. AI projects are not IT projects; they should be viewed as strategic business projects.

- ▶ To truly derive value from AI, you need to view it as a mainstay of your sales or business strategy and integrate it into it.

The use of AI technology should not be managed from a technology perspective, but from a business perspective. Because only the business perspective ensures that AI initiatives get the right focus. In reality, you put the sales strategy in the foreground and not the AI technology.

- ▶ This question should be focused: What are our business goals – and how can AI help us achieve them?

With its many possible applications, AI excites us, and in this enthusiasm lies the danger that it leads to a quick initiative but finally ends in disappointment. Because an ill-considered implementation of AI technology will in many cases fail or not fulfill the expectations placed on it. AI projects that are not aligned with business strategy usually result in scattered, ineffective efforts and ultimately end up as individual projects that are rarely followed up on. For AI to effectively deliver its potential, the right expectations must first be set for the technology, and those come from a business perspective.

6.1.1 The True Potential of AI Lies in Business Expansion and Revenue Gains

Although many companies see the potential of AI primarily in cost savings and increased productivity, its greatest added value is to be found on the revenue and growth side.

There is no doubt that the promise of AI for increasing sales productivity is great, and cost savings and productivity benefits are quite important. By automating routine tasks, AI frees up valuable sales resources, and focusing on automation as a first step can yield some successes relatively quickly, generating enthusiasm for the technology and laying a good foundation for further AI initiatives. But in the long run, the focus needs to be on business innovation. Because only this perspective enables companies not only to implement AI, but also to use it to develop innovative and contemporary business models and thus gain a competitive edge.

6.1.2 AI Changes Go-to-Market Strategies and Sales Models

In addition to optimizing existing processes, the primary focus must be on developing innovative business and sales models. This may be the more difficult path, but approaching AI deployment in this way will better reap its benefits and take them beyond mere automation and cost savings.

AI enables organizations to build new sales models, which are based primarily on optimally addressing the needs of the modern customer, not just on improving upon existing models that may have been successful in the past but may have become obsolete.

AI empowers us to develop agile and differentiated sales approaches that address customers' new needs and also evolve and develop with them. Because one thing is critical in the current circumstances:

- ▶ Traditional marketing strategies *have to* change and adapt to the call of the times.

AI can bring a decisive advantage here, and the strategic risk should not be underestimated here either: If you don't seize these opportunities yourself, the competition might.

Example

A good example of this is a bank in Germany: for one of its products, it uses AI to make the decision on whether to grant a loan not after the customer has submitted the online application, but while the customer is still filling out the form. This is an important distinction because in Germany, a person's credit score is negatively affected by a loan rejection. This approach counteracts this problem by not taking the process all the way to actual rejection. Within eight months of launching this AI-enabled service, lending for this specific product increased 10 to 15 times. This allows the bank to reach customers who would not have asked for a loan at all in a traditional process, creating a new business opportunity. A perfect example of the business perspective.

6.1.3 The Transformation of Business Processes and the Customer Are in the Foreground

Boston Consulting (Khodabandeh et al. [2019](#)) recommends this rule of thumb for effectively introducing AI technology into organizations:

- 10% Algorithms
- 20% Technologies
- 70% Transformation of business processes

As you can see, the focus is not on the technology side, but on the business perspective. The idea is to bring the technical and business sides together so that both can better understand what solutions are needed, what approaches are possible, and how to build them. It's more about people, processes, culture and business strategy than the technology itself.

In sales, above all, the customer perspective must not be missing: One should pay attention to a balanced combination of AI and the human factor towards the customer. Neither one nor the other should be overrated. The needs and expectations of the modern customer evolve as technology advances and, as a result, must be placed at the heart of any AI strategies in sales, rather than pursuing pure productivity initiatives. This is because the danger lies in not reaching the modern customer with their expectations despite high productivity in sales.

6.1.4 AI as a Strategic Sales Resource

AI should be viewed as a new additional resource within the sales organization that adds value on multiple levels:

- It caters to the needs of modern customers.
- It enables the development of innovative sales models.
- It optimizes processes and increases efficiency in the organization.

Companies that put the business perspective first and bring the three levels together not only implement AI as a technology, but also bring more intelligence into the entire organization and create the best conditions for securing the company's future. And for this, a well thought-out AI strategy is necessary.

6.2 Developing an AI Strategy

To truly and sustainably benefit from AI technology, it should be used with purpose and strategy. Many organizations try this, that, or the other tool that they have seen somewhere and are enthusiastic about ... But if you implement something without having defined the added value of the technology for the company, or without having aligned it with the corporate strategy, as well as without a clear expectation, the project will probably be doomed to failure or the technology will not be able to unfold its real potential. Thus, a strategic approach is needed here as well.

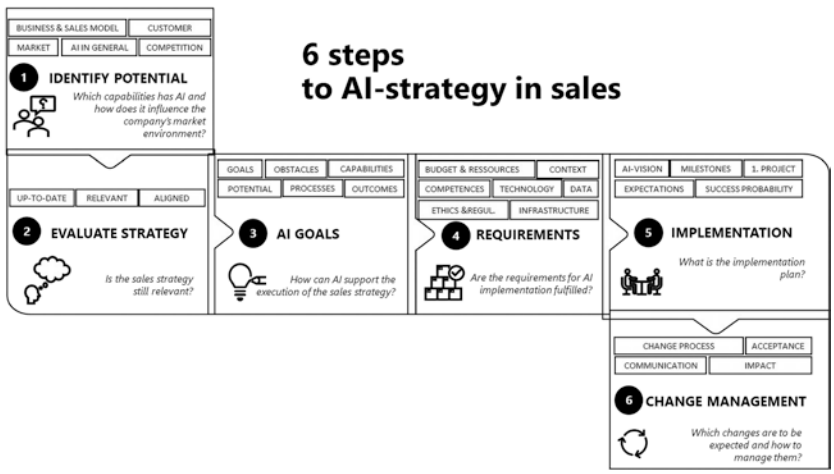


Fig. 6.1 Development of an AI strategy in sales

Developing a sound AI strategy for the sales organization involves six steps, answering six key questions (see Fig. 6.1).

6.2.1 Evaluation of AI Potential: What Can AI Do and How Does It Influence the Market Environment?

For the strategy to be promising, the organization needs to understand the opportunities and potentials of the technology at multiple levels and relate them to the opportunities and capabilities of its own organization. It is necessary to identify the potentials, the risks and the limitations of the technology. For this, the right questions need to be asked to find out where AI is most applicable and where the ROI is highest. Thus, the first step should be to identify the potential of AI on several levels:

- What can **AI** do in general?
- What opportunities does AI offer for your **market**?
- What innovative **business and sales models** does AI enable?

- What are the needs and expectations of **customers**, and to what extent can AI technology address them?
- What are the competitors doing? To what extent are **competitors** already using AI?

Here it makes sense to organize workshops and lectures and invite experts to create the necessary knowledge base about the possibilities and potential of AI within the organization.

6.2.2 Strategy Evaluation: Is the Sales Strategy Up to Date?

With the findings from the first step, the second step involves taking a closer look at the existing sales strategy and the business and sales model and examining them for adaptation possibilities and necessities. This is because an up-to-date sales strategy is the basis for developing an AI strategy. In doing so, the following is considered:

- Is the sales strategy still **adequate to** achieve the company's goals?
- Is the sales model still **up-to-date** and does it meet market needs?
- Are the sales approaches and processes **aligned** with modern customer needs?

The aim of this step is to identify whether the sales strategy and the marketing approaches are still up-to-date and whether the strategy should be adapted if necessary. Because basing a technology on models or processes that are not optimal or not outdated would be a gross mistake.

6.2.3 AI Priorities and Objectives: How Can AI Support the Implementation of the Sales Strategy?

Now that you're clear on what your sales strategy looks like and that your sales approaches are state-of-the-art, you can start to figure out how AI can help execute your strategy.

- How can AI help achieve the strategic **goals**?
- What **problems** want or need to be solved?

- What new **business potential** can AI open up?
- How can AI optimize existing **processes**?
- What new **capabilities** can AI bring to the organization?
- What is to be achieved with AI technology? What concrete **results** are expected?

First, a plan must be made and the expectations and requirements for the technology must be defined, and only then can you start looking for the right tools, not the other way around. Because technology can do many things and there are a lot of tools, the trick is to choose the ones that you really need for your company and that will also help you move forward.

6.2.4 Prerequisites: Are the Requirements for the Implementation of AI Fulfilled?

In order for AI to be implemented, certain prerequisites must be met. These should be considered as part of the strategy development, because a good initiative can quickly end in a fiasco if the necessary requirements for its implementation have not been met. In addition to the classic prerequisites such as budget and resources, there are AI-specific requirements that must be met to varying degrees depending on the project focus.

- What **budget** and **resources** are needed?
- How can access to the necessary **technology** be granted?
- Is the necessary **infrastructure in place**?
- Are the affected **processes** efficient?
- Is the necessary **data** available or can it be obtained?
- How can the **ethical** and **regulatory** requirements (GDPR compliance) be met?
- Are the necessary **skills** and **competences** available or how can they be created?

Section 6.5 is devoted to these issues so that you can gain a better understanding of the requirements and options for meeting them.

6.2.5 Implementation: What Is the Implementation Plan?

To ensure the success of AI investments, one needs a clear implementation plan with a clear short term as well as long term objective. This is because due to its diverse capabilities, AI implementation is a long endeavor that consists of multiple projects of varying sizes. You need a vision to set the direction, but the entire AI journey will happen in many small steps. After all, AI implementation should be a promise for life, not just a brief rendezvous.

- What is the long-term **goal** and the **AI vision**?
- What are the **milestones in the AI journey**?
- Is the necessary **context** given: Work environment, business context?
- How can the **chances of success** of AI implementation be increased?
- Which should be the **first project**? Where are the best chances of success?
- What **expectations** should be set for the first AI project?

To increase the chances of success of AI projects, the appropriate context must also be created. This means that the project goals should focus on the business context and be integrated into the corporate strategy. It is important to create an innovative and unbiased working environment that allows agility, flexibility and experimentation freedom for the project team. A culture of error is part of this, and you also need to ensure quick wins to keep motivation high in the team.

In any case, it makes sense to start with a small and very promising project to reach the first important milestone on the AI journey. We want the whole project to gain acceptance and support so the motivation for larger projects to be high. Thus, it is crucial that the first project is a success. For this reason, in Sect. 6.6 we look at this topic in more detail and you will learn what to look out for.

6.2.6 Change Management: What Changes Does the Strategy Entail?

The changes that AI brings can be drastic for the entire company. All possible factors need to be considered, and the overall impact of AI implementation requires a

thorough evaluation that forms the basis for an appropriate change management process.

- What **impact** will AI have on sales: Processes, activities, employees, teams?
- How should **acceptance of** AI technology be created inside and outside the sales organization?
- How should the **change process** be managed?
- What should the **communication process** look like?

It is definitely important to involve the entire organization, even outside the sales structures, right from the beginning. Because you will need the support of the entire company to create broad acceptance for the AI strategy.

- ▶ A sound approach is the first step to success.

Introducing AI into the enterprise is no easy task, and if you decide to do it and are willing to invest resources and money, then you should also approach it in a structured and sound manner. A well thought-out strategy creates the necessary basis to ensure the success of the project. In the process of strategy development you will identify many potential stumbling blocks, there is always such a thing and it is even desirable. Because this process allows you to discover new opportunities and potential for your business. It is a challenge that opens a great many opportunities.

- ▶ Consider the AI Challenge as an opportunity to truly transform your sales force to secure the future of your business.

One can, and should also, involve specialized consultants and experts in strategy development and for implementation support. Apart from the critical and unbiased view of the processes from the “outside”, they also bring in new ideas and perspectives and help to take off the blinkers.

To help you on this journey, Sects. 6.3, 6.4, 6.5 and 6.6 focus on some specific perspectives in the AI strategy implementation process that you should pay particular attention to during AI implementation.

6.3 Promoting Acceptance Among Employees

The implementation of AI is not synonymous with the introduction of a new software program; it has an impact on how employees work, behave and make decisions. Consequently, one of the biggest hurdles in implementing an AI strategy is creating its acceptance within the organization. Many studies show that the greatest risk of failure lies in employee attitudes toward the technology, not in the adoption or capabilities of the technology.

To mitigate this risk, sales organizations need a change management process to create an understanding of AI's capabilities especially among employees in order to effectively implement the technology within the organization. This understanding is necessary on multiple levels:

- **Personal impact:** How does AI impact the sales rep personally: their productivity, efficiency, goal achievement, reputation with customers, success, etc.?
- **Impact on the organization:** What does AI do for the organization? What opportunities does it bring to help the organization achieve its goals?
- **Market impact:** How is the technology evolving and how is it being used by the competition?
- **Customer Impact:** How does AI technology influence customer needs and expectations?

It is necessary for salespeople to understand that, contrary to what is reported in the media, AI will not replace them. Instead, it empowers them to focus on work that is more valuable, meaningful and truly enjoyable. It's critical that employees realize that AI can make a significant difference in helping them and the entire organization achieve their goals better and faster. That being said, it is also necessary for employees to understand that the market is not waiting for their organization to evolve and that the competition may already be far ahead and, most importantly, customers have already embraced the technology. The new customer experience made possible by AI technology is becoming the new standard and also expected and even assumed by customers.

- One of the most important principles is: Awareness before function!

Usually, organizations focus on training employees on the functionality and usability of the technology and overlook the need to create awareness of the benefits of the technology. Training, lectures, workshops and expert dialogues are a good way to build this knowledge within the organization. The topic should be first on the agenda. Because by creating a basic understanding of AI among salespeople, you gain a big advantage: you build an additional source of ideas that generates a larger pool of possible applications for AI, which means more AI potential becomes apparent.

Empowering employees to make their own contribution to the development and implementation of the AI strategy will achieve more: more enthusiasm, more business opportunities and higher acceptance. And consequently, this will also increase the chances of success for AI investments.

6.4 Developing AI Projects in Sales

Once the strategy is in place, you start to tackle the individual projects. In doing so, you have to consider the specifics of sales, which will be discussed in the following. This is because AI projects in sales differ from classic AI or IT projects. In particular, the business perspective is relevant here, or more precisely: the customer perspective.

6.4.1 Customer Perspective

Projects are often initiated without considering the most important perspective for sales: the customer perspective. Without the customer perspective, processes are developed purely from the company's own point of view, and customer needs are often not taken into account. This can lead to the customer not being reached in the end. The following six steps are necessary and represent the correct sequence.

1. Putting the Buyer Journey in the Foreground

In the first step, it is necessary to look at the buying process or the purchasing process of the target customer: from his customer perspective. Here lurks

another danger: that one deals solely with the **customer** journey, as many marketing organizations usually do. The problem with this is that you often look at this journey from your own perspective and not from the customer's perspective. It should be looked at from the customer's perspective: **Buyer Journey**. In some cases it's the same thing, however, with the Customer Journey approach you tend to define a process for the customer to follow, forgetting to look at their *actual* buying process as a buyer. Often these perspectives are not identical.

To meet the customers where they are, we need to take their **buyer's perspective** and analyze their **buyer journey in a** sound way. To do this, you need these three components:

- a detailed target customer profile, including his digital behaviour, plus
- a thorough buying centre analysis (the people on customer's side involved in the purchasing process) and
- an analysis of the customer procurement process: the Buyer Journey.

The focus is on these questions:

- How does the typical customer behave?
- How does the customer usually shop?
- What are his steps and behavior in his buying decision process?

As shown in Fig. 6.2, at every step of their procurement process, customers have questions to which they seek answers. We must answer these questions meticulously. Basically, we evaluate the customer's needs at every single step of their buying process.

2. Mirroring with the sales process

The next step is to check whether our own sales process reflects this buyer journey. Classic example: The customer has been shopping online for a long time and we still employ a field sales team. Many companies are not yet aware that customer behavior and their procurement process have changed significantly as a result of digitalization, and that their sales organizations have not yet adapted their processes. This must happen at this point at the latest by aligning the sales process with the customer's purchasing process.

3. Analysis and adaptation of the sales process

Here, the steps in the sales process are adapted to the customer procurement process. Each step of the sales process should reflect the customer's purchasing

Customer / Buyer Journey - the basis for AI-evaluation for sales

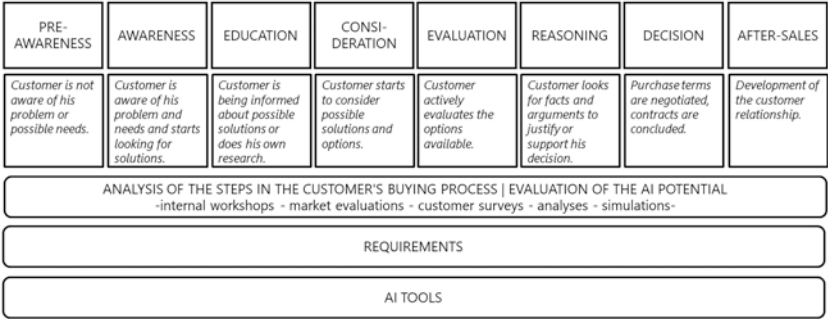


Fig. 6.2 Customer buying process as a basis for the development of AI projects in sales

- process and address their specific needs in that step. Only with this analysis do we create a process that really takes into account the needs of your customers, not just those of our own organization.
4. **Evaluation of the need for digitization in the sales process**
- Only after we have adapted the sales process to the requirements of the market do we analyze and evaluate the AI potential. In doing so, we answer the question: *Which steps and which activities in the sales process should be supported by technology?* We find out what potential the technology has to offer, which process steps it should support or take over, and which areas should still remain in human hands. Because you can also digitize yourself to death if you disregard the human factor that may be important for the customer.
5. **Definition of requirements for the technology**
- Now, when it has been determined what is to be digitized in the sales process, the requirements for the technology are determined. Because the technology should be the means to an end and not the end. It should follow the requirements of the sales process, not the other way around.

6. Evaluation of technologies and providers

And only in the very last step are the appropriate tools and applications selected based on defined requirements. There are enough tools and providers, we just have to find the right ones for our own organization that also meet our specific requirements.

In reality, these six steps are usually executed in reverse order. People get excited about technology or get acquired by vendors, leaving out the very most important step in the process: reviewing and aligning processes with customer needs. This often results in the technology failing to meet the expectations placed on it. Or rather, it fails to live up to expectations, because often with such an approach, the expectations of the technology are not defined at all. You implement something and hope that it will be better.

One secret should be revealed at this point: **Hope is not a strategy**. You should think carefully about how technology should support the fulfilment of your own company's goals and, while you should certainly be fascinated by technology, you should not be blinded by it. Even though technology can do many things, its usefulness for one's own organization must first be well examined. And above all, the expectations and needs of the customers must be placed in the foreground. This may save a lot of money and spare bad investments. Examples of this are online shops that no customer uses, or advertising on social media which are ignored by the customers.

- ▶ It is not advisable to implement any AI tools without this six-step process or similar analyses. This is because there is a great risk that the tools will not work as expected and will quickly lose relevance, even despite their great potential for the organization.

6.4.2 Sales Perspective

In addition to the customer perspective, there is a second important perspective for implementing AI projects in sales: the sales perspective, which is the view from the sales point of view. Here, the sales process is analyzed in depth in its respective

phases with the goal of leveraging revenue, effectiveness, and efficiency potentials. And, crucially, in that order:

1. Revenue
2. Effectiveness
3. Efficiency

Because this is where you often fall into the trap of primarily looking for efficiency potential. As already mentioned, this is an important step, but the sales organization benefits most from the AI technology’s potential on the business and revenue side.

These three factors are evaluated in each individual step of the sales process and the potential of the AI technology is evaluated in parallel. After that, the requirements are defined and only then the tools are selected (see Fig. 6.3).

If we’re honest, we have to admit that most companies implement technology from their own perspective, focusing only on the things that are important to them. But if you incorporate both perspectives – your own and the customer’s – you will get the best result. Therefore, rather than asking the question “Either ... or?” when considering these two approaches, consider them both together. Only the combination of both approaches will yield the best possible result for the organization.

Sales Process the basis for AI evaluation for sales

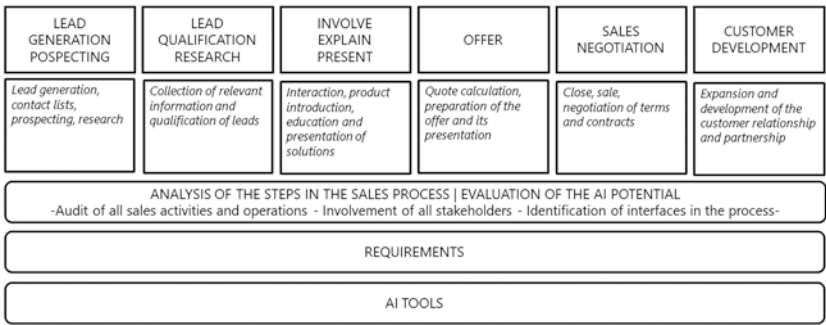


Fig. 6.3 Sales perspective in the development of AI projects

6.5 Creating Conditions

When developing AI applications in your own company, it is not enough to just follow the right project steps. It is also necessary to create the necessary conditions within the organization, which are an integral part of an AI strategy, see Sect. 6.2. You will learn what you should consider in the following sections (see Sects. 6.5.1, 6.5.2, 6.5.3, 6.5.4, 6.5.5, 6.5.6 and 6.5.7).

6.5.1 Budget and Resources

One of the important prerequisites for the successful implementation of AI in companies is the allocation of sufficient budget funds and resources. Only those initiatives that have the necessary resources and budget will be successful. AI is a strategic topic and savings should not be made in the wrong place.

Budget

AI projects are often, but not necessarily, associated with high costs. A distinction is made here between software, development, implementation and administrative costs.

- **Software costs**

There are wide price differences for AI software. The most common pricing models for off-the-shelf products are subscriptions and can be user-based or feature-based, requiring different budgeting strategies. Pricing will vary depending on the use case: whether you implement an entire CRM system or a BI module or a social media monitoring tool.

- **Development costs**

If the software is developed specifically for the company, development costs are incurred. Here, internal costs may be incurred or costs for external services and programming.

- **Implementation costs**

Initial and setup costs are often incurred for the implementation of external solutions. Adaptations and customizing of products are also associated with additional costs, as well as integration into existing systems and interface programming – whether for development or additional licensing. In addition, project management and consulting costs may arise.

- **Administrative costs**

Once the solution is implemented, the expenses usually don't end there. Recruitment, security, data protection requirements, training and skills development within the organisation are some of the typically hidden costs that can be overlooked. In addition, there may be other costs to drive adoption of the technology within the organization and create awareness of its benefits: for expert presentations, consultations and training.

Allocation of Resources

In addition to budget, AI projects also need to allocate sufficient resources. While existing human resources don't directly add costs, the project may need a lot of workforce resources and keep staff from their actual jobs. Here are some of the resource-consuming activities in AI projects to consider:

- Search, validate and correct data
- Audit and adaptation of processes
- Redesign of work processes
- Contribution of expertise: Business Intelligence
- Tests and evaluations
- Communication
- Trainings

It is also important to consider which departments and individuals should be involved and to what extent, not only out of necessity but also from a strategic point of view, in order to promote the success of the project.

6.5.2 Technology Access

The use of AI is about technology and so we also need access to it. In this context, there is often a misunderstanding that you have to develop the technology yourself or build up the necessary competencies in your own company. In addition to this organic way, there is also the possibility of implementing ready-made solutions,

which are often overlooked. A few years ago, it was actually necessary to develop the solutions yourself, but now there are many and mature external applications that can be accessed.

Evaluate and Implement External AI Tools

When evaluating external AI tools, one basically follows the classic implementation steps of an external solution. Simplified, it looks like this:

1. **Discover:**
 - Market Screening
 - Evaluation of applications
 - Evaluation of suppliers
 - Comparison with own requirements
2. **Selection:**
 - Tenders
 - Negotiations
 - Conditions
3. **Implementation:**
 - Definition of project goals and expectations
 - Definition of deliverables: Results
 - Determination of the project timeline
 - Appointment of the project team

Develop AI Applications Internally

The internal development of AI applications is guided by these five project steps (see Fig. 6.4):

1. **Case definition:** Problem definition and development of the business case
2. **Design:** Definition of the requirements for the development
3. **Data and models:** Collection of data sets and development of models
4. **Development and testing:** Development of the AI application and execution of tests
5. **Go live and monitoring:** Implementation of the application and monitoring of performance

Develop AI applications internally

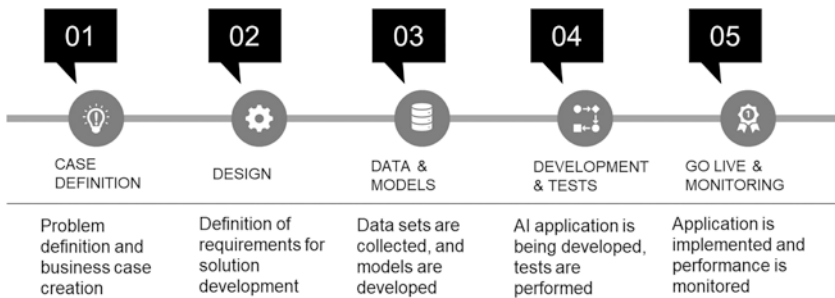


Fig. 6.4 Developing AI applications internally

AI Is Not Just Software

Whether you buy in AI technology or develop it yourself, you need to understand the key differentiator of AI: AI is not just software that works once installed. AI is implemented like software, but the big difference is often that AI writes its own algorithms based on training data. For AI to work, you need the combination of software, data, and business intelligence.

- ▶ AI = software (algorithms) + data + intelligence (business).

Unlike the introduction of “classic” software, the implementation of AI technology takes a very different approach. AI requires looking at a problem and seeing if there is a way to solve it by rewriting the business process itself. Business intelligence is a core factor in the development and adoption of AI, especially in sales. A study by IDC (2019) found that 60% of organizations reported changes in their business model related to AI adoption. It is important to properly define the human inputs on which successful AI projects depend and to respectively align the roles of employees in AI projects.

- ▶ Human intelligence is always necessary.

Another misconception when implementing AI is the belief that all decisions are made by the machine. Many companies are not prepared for the fact that the results of machine learning will not always be right. In fact, some of them will always be wrong, and for that you have to provide exceptions and design feedback loops. The fact is that in most cases, human validation will be necessary. Trust the technology, but verify if it works as expected. Frequent testing as well as re-evaluation of assumptions is necessary. Getting the technology to work is one thing, integrating it into actual business practice is another.

6.5.3 Infrastructure

Especially if you are developing AI within your own organization, you will also need to ensure the necessary infrastructure. Depending on the application, different building blocks will be necessary, such as:

- Databases and centres
- Storage
- High computing power: CPUs & GPUs
- Network infrastructure
- Development environment
- Security
- Ongoing administration and maintenance

6.5.4 Processes

Before processes are digitized and supported with technology, they must be reviewed and corrected. Because if you digitize a bad process, you end up with a digital but still bad process. In this case, an audit of existing processes should be carried out in advance, as a result of which whole or parts of processes must first be optimized. Consulting by external parties is definitely useful in order to take a critical look at the processes and to discover optimization potentials.

Processes must also be put in place to validate the results of AI. AI is not a technology that simply works once it is set up. In most cases, there will be a need

to validate the results that the algorithms produce. Basically, you also need processes to train the algorithms and validate their results.

6.5.5 Data Ecosystem

AI cannot function without data. Data is the fodder for algorithms: it makes them work, and it makes them stronger and smarter. When creating a relevant data base, the following considerations must be made:

- Which data are **necessary**?
- What data is **available**?
- What data do you need **access to**: externally?
- Is the **quality of** the data given?

Even though many sales organizations don't have proper and relevant data, we don't lack opportunities to generate or access relevant data today. It's just a matter of creating awareness. Often, data lies idle somewhere and only individuals – usually from the IT department – know of its existence. As a rule, a modern company produces a lot of relevant sales data, here are a few examples:

- **Transactional data:** Purchases, sales, products, history, offers, etc.
- **Behavioral data:** On-site, off-site, interactions, sign-ins and sign-outs, social media, email interactions, newsletters, blogs, events, apps, point of sale, loyalty programs, promotions, etc.
- **Customer data:** Company data, personal data, etc.
- **Analytical data:** Profitability, development, performance, etc.

These data are available from various sources (see Fig. 6.5).

As AI uses the database to learn, it is important to ensure that the content of the data is correct for the intended purpose. This is not just about the details and timeliness of data, but also its content: It must be checked whether the data is biased. Thus, the data must be:

- as complete and detailed as possible,
- free of incoherent information,

Data sources in sales

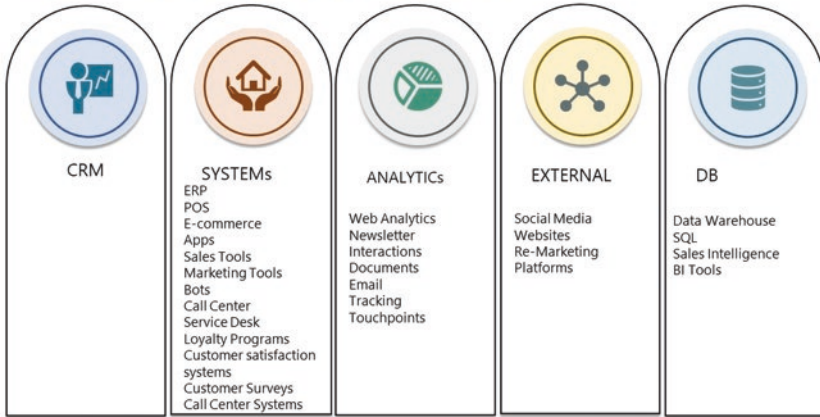


Fig. 6.5 Sources for sales data

- provided with all the necessary attributes that an algorithm needs to perform its task, and
- be free from biases.

Have you ever heard the expression: *garbage in, garbage out*? This means that if the data is garbage, the algorithms will also produce garbage from it. A striking example of this comes from the USA, where the algorithms would have sentenced a black man to a higher penalty than a white man, given the same starting point and evidence. The algorithms learned from decades of convictions based on biased data, and these indicated that Blacks should get higher sentences than Whites. Such surprises, called algorithmic bias, are to be expected, and therefore, apart from keeping data clean, it is important to use business intelligence in the process and validate the results.

AI is brutally honest and unambiguous in its findings: it tells us the cold, hard data truth. But it also needs us to learn faster and correctly; it needs human guidance and input to amplify the data it receives. This requires patience, because it doesn't happen overnight.

6.5.6 Ethics and Regulations

In addition to privacy concerns, AI raises a number of ethical issues, such as responsibility and delegation of decisions, transparency, bias and discrimination. These issues certainly need to be considered when introducing AI. Even though most ethical discussions are more in the realm of AGI and ASI, which are still far in the future, companies need to ensure that people – customers and employees – do not have their rights violated when implementing AI.

In terms of data processing, the GDPR poses a particular challenge in Europe. Even though the GDPR does not specifically refer to AI, it regulates the processing of personal data regardless of the technology used. As a result, any AI project that involves the processing of personal data is affected by these regulations.

- The basic question that needs to be answered here: Does the project process personal data or not?

The answer to this question determines the application of the GDPR. If yes, then the “Privacy by Design” requirement of the GDPR means that the interests of data subjects must be protected and respected in the best possible way as early as the design phase of the software, and data protection must be integrated into all life cycles of systems, processes and products.

Companies outside Europe are much less restricted in designing AI business models and products, as they do not have to comply with the GDPR regulations. Thus, when working with a non-European provider, it must be ensured that its solution is GDPR-compliant for use within Europe.

6.5.7 Skills and Competences

AI implementation logically also requires AI expertise. Thorough consideration should be given to whether the AI-specific competencies need to be built up within the company itself or whether it is sufficient to gain access to them, for example via external providers, service providers and consultants. Many companies get stuck at this step because they assume they need to build all the expertise themselves, which

can be very costly and is not always necessary. In many cases, working with external partners will do the trick.

Depending on the particular application, there are several possibilities:

- Purchase of an external solution
- Cooperation with a partner during the development of the AI project
- Outsourcing of the entire AI development process
- Development of a solution with internal resources

Whichever approach seems to be the best, it is always worthwhile to explore existing solutions on the market before taking the plunge into in-house development. It's not always necessary to reinvent the wheel, where you can access ready-made solutions or adapt them to your own needs. If you find a product that fits your needs, then a direct integration will probably be the most cost-effective and quickest approach.

If the solution is to be developed internally, the following skills and competencies are usually required:

- **Machine learning engineers and/or data scientists** to program the required algorithms,
- **Data integration engineers** to automate data entry processes,
- **Software developers** to pick the right technology platforms and develop APIs,
- **Business competency experts** to understand the user needs and analyze the business problems or bring in the business requirements.

To build up these skills in the company, you can hire new employees in the traditional way. But data scientists, engineers and software developers are currently in high demand, and you don't always have the opportunity to find the right professionals. Instead, you can retrain and educate existing employees or access external resources for the duration of the project: platforms, developers, service providers. Basically, you work with remote developers or AI consultants who share their expertise with the company and work on a project basis.

CONCLUSION: The Implementation of AI Is a Serious Matter

Even though there are enough “off-the-shelf” applications on the market that can be implemented without much effort, the strategic integration of AI in companies is a serious matter and a challenge that should not be underestimated. It requires resources, in-depth knowledge, a lot of time and dedication. To successfully implement AI and also truly benefit from its immense potential, one should not just follow the trends, but instead focus on creating one’s own AI vision and implementing it step by step. It’s a long journey that always starts with a first small step. And especially in the AI context, it is important to ensure the success of the first efforts.

6.6 Ensuring the Success of the First AI Project

If you’ve reached this page, then you now know how incredibly diverse the possibilities of AI are, and may already have an idea of what AI can do for your business. You may also already have an idea of what it takes to implement it within your sales organization. So far so good, but how do we remove the last obstacle and get started?

Especially when it comes to AI, a good and successful start is important. Even though AI implementation will sometimes be limited to individual projects, in most cases, however, a comprehensive and long-term strategic approach makes sense. Because AI brings so many diverse opportunities to sales, its implementation is not a sprint, but a marathon. For this reason, a strategy is absolutely necessary, because it will set the best stage for success, which it should reap with a successful first step.

For this, we need a first promising project that sets a first significant step for the future of AI in the company. Even if the goal is big and broad, you should start small, otherwise you run the risk of getting bogged down and overwhelming the organization. We remember Alice, who landed in a room with many doors waiting to be opened. And to get into Wonderland, Alice first had to take a magic pill to make herself small so she could get through. So, in order to get into AI Wonderland, we too have to start with a small project first, and only then tackle the larger projects.

The goal with the first project is to prove the added value of AI for the company. Therefore, it makes sense to start with a small but very promising project. We want to make sure that the first project succeeds, because failure can set the whole topic back years or, in the worst case, question the relevance of the AI technology.

6.6.1 Five Success Factors of the First AI Project

Instead of hoping that the first project will be a success, we want to strategically and methodically “ensure” its success, at least do all that is necessary to increase its chances of success. In this context, one can be guided by these five success factors:

1. **Pick the “right” project.**

Pick the project with the best chance of success, where the data is available, the complexity is low, and the expertise is there. Later, with a few wins under your belt, you can roll out the AI Technology at a higher scale strategically and with full stakeholder support.

The goal is to ensure a success in order to create acceptance at all levels across the company. Quite simply, it’s about securing a quick initial success, but one that also demonstrates a clear added value of AI.

2. **Make sure you have the “right” objective.**

Define the short, medium and long-term goals and clarify the expectations in terms of time, resources and results. Don’t think too big here for the first project. The goal is to ensure that the project is successful and demonstrates exciting opportunities for AI. After all, the success of the project will impact the sales organization and the rest of the company.

The goal is not to implement AI! We are not concerned with the technology itself, but with the added value it brings to the organization. The goal with the first project is to remove the remaining doubts and create the necessary conviction for the AI added value. It is also about securing the knowledge base within the company, with the overall goal of building a good foundation for future projects.

3. Put together the “right” team.

You need a team that combines technical and business expertise. You need business intelligence in the team, in addition to IT and AI experts, to properly highlight the added value of AI. Put someone in charge who can work cross-functionally and bring AI expertise together with industry expertise on the team. Start with a small and dynamic team. Pilot projects need to be agile and flexible, not stifled in their own structures.

The success of the project will depend on the people involved. Make sure you have the right skill mix. You don’t need a full team to get started. Depending on the use case, you will need different skills, but more importantly, you will need the *right* mindset of the stakeholders because it will determine the progress of the project. First and foremost, you need people who are willing to engage with basic AI best practices, rather than experts who tend to bring in too much complexity and slow down the project.

4. Define sufficient and “right” resources.

If you want AI to become a permanent fixture in your organization, you need to allocate the necessary budgets, the time, and also the people. That doesn’t mean you should throw money around, but you can’t cut corners here either. A cost-optimized approach is perfectly legitimate, but we don’t want to take the wind out of the sails of good intentions with a cost-cutting attitude.

Do not cut corners, because the goal is to implement the project. If you initiate the project and do not allocate enough resources, the project will either proceed too slowly or too laboriously and frustratingly, consequently the result will also be sub-optimal.

5. Ensure “sufficient” and “right” communication.

When the project reaches important milestones, and especially when it delivers a successful result, be sure to communicate about it. The success must be awarded and communicated within the company. The recognition of the project team by the management and the visible success of the pilot project will play a key role for further initiatives.

The goal is to increase motivation and secure support across the organization. Support the team, allow for mistakes, reward and celebrate the successes. Recognition and rewards for success will encourage the rest of the organization to get involved as well, increasing adoption of AI.

- To ensure the success of the first project, we need the “**right five**”: **objective, project, team, resources and communication**. The overall goal is to “prove” the added value of AI technology for the company.

6.6.2 Three Implementation Traps to Avoid in Your First AI Project

As with many other strategic undertakings, AI has typical pitfalls or misconceptions that usually hinder project implementation. The three most common misconceptions are as follows:

1. **The Expert Trap: To get started with AI, you need AI expertise.**

The majority of companies still think they have to develop AI systems themselves. This book has hopefully cleared up that misconception, as the market is changing rapidly and you can access AI solution providers and not have to develop the technology yourself. Technology today is easy to use and accessible to everyone. You don’t have to be an AI expert, and not even an understanding of how it works is necessary to start, use, and benefit from AI.

It is important to understand what AI can do for the business.

2. **The data trap: You can’t use AI without your own data.**

Data is an integral part of any AI application, that’s a fact. But that doesn’t mean that data has to be available in your own company before implementing AI. Not all AI applications require the availability of data, and there are some application areas where they can start without existing data. Some tools use algorithms that have already been sufficiently trained with other data. In addition, technology giants are increasingly offering their platforms open source, including development tools and datasets that can be used to train the algorithms.

AI can also start based on external data and build necessary proprietary data as it goes along.

3. **The project trap: AI projects are IT projects.**

One of the main problems is that companies often implement the technology and then look for problems it can solve, rather than starting from the business value proposition. IT alone, without business intelligence, will not be sufficient

for the success of an AI project. The business perspective is the biggest success factor in implementing AI, not the software itself.

AI projects are first and foremost business projects.

Hopefully, these suggestions will help you quickly discover and realize the potential of AI for your organization, even if it will be in small steps at first. The goal is for these small advances to create a good foundation for future implementation across several processes in sales operations. Once you create multiple, albeit smaller, successes, you will gain acceptance and set the stage for AI to eventually powerfully support your sales organization and turn a buzzword into tangible reality.

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Conclusion: The New Intelligence

Thank you for keeping with me until the end of this AI journey. Hopefully, you've discovered many opportunities and generated ideas about how AI can help your sales force better and faster achieve your business goals. In this book, I've tried to offer you a better understanding of what AI can do for you and how you can approach this topic. My primary goal was to demystify the term Artificial Intelligence and make it tangible for sales.

The beginning is often the hardest step and I hope this book was able to help you overcome this biggest hurdle. You may now have a concrete idea of what you are going to do and can now embark on your individual AI journey, which will most likely not develop exactly as planned. It will be necessary to keep adjusting the direction and to deal with changing circumstances and new insights. You will experience, just as Alice did in Wonderland, how assumptions change and initial parameters transform. Just as the cricket bat suddenly turns into a flamingo and rolls in when you want to hit the ball, assumptions made in AI projects will often turn out to be wrong, and the volatility of markets in the context of rapidly evolving technology will keep changing the conditions and parameters in projects. Assume that the chess pieces will keep continuously rearranging themselves.

You should be aware of all the potential challenges in implementing AI, but you should certainly not be discouraged by them. The Alice attitude is of great use here: Openness, curiosity, open-mindedness, caution and courage.

The AI opportunities are greater than their challenges.

- ▶ AI has the potential to and will definitely revolutionize the sales field, with the one big added value: it brings a new and greater intelligence to sales.

Just as electricity improved our vision at night and aviation technology enabled us to travel unimaginable distances, AI will bring a new dimension to our lives. Electricity didn't replace our sight, it enhanced it. Aviation technology didn't make our legs useless, it overcame our limits of movement. So too, AI will not replace humans in sales, but enhance their intelligence. We can only benefit from it, if we know how.

Hopefully, the suggestions in this book will enable you to take your sales organization to the next level of development and create more intelligence in your processes, activities and approaches. I wish you every success in this endeavor.

Please share your success – big and small – and your experiences – positive and negative – on your AI journey with me. I am especially glad to hear about that.

Many thanks in advance
Livia Rainsberger

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